

AGRICULTURAL STATISTICS
OF
IRELAND,

DETAILED REPORT ON AGRICULTURE

END OF YEAR

1898.

LITTON, L. L. N.

SALE OF GOVERNMENT PUBLICATIONS.

Non-national Forces have been appointed sale Agents for the sale of Government Publications, in the following manner:—
 1. **Parliamentary Reports and Papers.**—**Agents for the sale of Government Publications, &c., &c., and all such works as may be ordered from them either directly or through retail booksellers, who are entitled to a discount of 25 per cent. on the selling price.**

IN LONDON:—

Printed Publications excepting Ordnance and Geological Maps, the Hydrographical Works of the Admiralty, and Patent Office Publications.—**Messrs. E. & J. Spence, 120, Strand, London, W.C.**

Geographical Maps.—**Mr. R. Sparrow, Cockspur Street, S.W.**

Printed Maps of the Admiralty.—**Mr. J. D. Porrett, 31, Strand, E.C.**

Patent Office Publications are sold at the Patent Office.

IN GLASGOW:—**Books and Maps, excepting the Hydrographical Works of the Admiralty and Patent Office Publications.**—**Messrs. James Watson & Co., 12, Hanover Street, Edinburgh, and 20, West Nile Street, Glasgow.**

IN DUBLIN:—**James Watson, Francis & Co., Limited, 104, Grafton Street, Dublin.**

SOLE AGENTS FOR GREAT BRITAIN AND IRELAND.—**Agents for the sale of the above publications, &c., &c., and all such works as may be ordered from them either directly or through retail booksellers, who are entitled to a discount of 25 per cent. on the selling price.**

Printed Publications, and all such of the most important Parliamentary and Official Publications, recently issued.

Publications.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

General Summary of the most important Parliamentary and Official Publications, recently issued.

AGRICULTURAL STATISTICS

OF

IRELAND,

WITH

DETAILED REPORT ON AGRICULTURE,

FOR THE YEAR

1898.

DIVISION OF LAND; ACREAGE UNDER CROPS; NUMBER AND SIZE OF HOLDINGS; NUMBER OF OCCUPIERS OF LAND; WOODS AND PLANTATIONS; RATES OF PRODUCE; NUMBER, AGES, &c., OF LIVE STOCK; NUMBER OF BOARS KEPT FOR BREEDING PURPOSES; DAIRY INDUSTRIES; DISEASES OF ANIMALS; EXPORTS AND IMPORTS OF LIVE STOCK; HONEY PRODUCED; NUMBER OF SCUTCHING MILLS; NUMBER OF CORN MILLS; SILOS AND ENSILAGE; FORESTRY OPERATIONS; WAGES OF AGRICULTURAL LABOURERS; THE WEATHER.

Presented to both Houses of Parliament by Command of Her Majesty.



DUBLIN:

PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY ALEXANDER THOM & CO. (LIMITED).

And to be purchased, either directly or through any Bookseller, from
HODGES, FRODIP, and Co. (Limited), 104, Grafton-street, Dublin; or
EYRE and SPOTTISWOODE, East Harding-street, Fleet-street, E.C., and

32, Abingdon-street, Westminster, S.W.; or

JOHN MENZIES and Co., 12, Hanover-street, Edinburgh, and 90, West Nile-street, Glasgow

1899.

[G.—9389.] Price 11½d.

CONTENTS.

REPORT :—

Page

DIVISION OF LAND, TILLAGE, &c.

TABLE I.—Average under Crops in 1897 and 1898, and the Increase or Decrease in the latter year, with proportionate Area under each Crop,	5
" II.—Extent of Land and proportional Area under Cereal Crops, Green Crops, Flax, Grass, Woods and Plantations, Fallow and Bog, Waste, Water, &c., in each year from 1888 to 1898, and Averages for the ten years 1888-97; also the number of Holdings exceeding One Acre,	8
" III.—Number of Holdings, by Classes, for each County and Province, in 1897 and 1898, and the Increase or Decrease in the latter year,	11
" IV.—Return of the Number of Occupiers resident in each County and Province in 1898, classified according to the total extent of land held,	12
" V.—Number of Holdings above One Acre in each Province in 1841, 1851, 1861, 1871, 1881, 1891, and 1898, according to the classification of the Census Commissioners of 1841,	13
Woods and Plantations in 1898,	14

PRODUCE OF THE CROPS:

The Weather,	14
TABLE VI.—Total Produce of the principal Crops in 1897 and 1898, and the Increase or Decrease in the latter year,	15
" VII.—Estimated Average Produce per Statute Acre of the principal Crops in 1897 and 1898, and the Increase or Decrease in the latter year,	16
" VIII.—Extent under each of the principal Crops, and the Total Produce, for all Ireland, in each year from 1888 to 1898 inclusive, with the average yield per Statute Acre for the ten years 1888-97,	16

LIVE STOCK:

" IX.—Number and Ages of Live Stock in 1897 and 1898, and the Increase or Decrease in each description in the latter year,	17
" X.—Number of Live Stock in each year from 1888 to 1898, with averages for the ten years 1888-97,	18
" XI.—The proportion per cent. of Horses, Cattle, Sheep, and Pigs according to age, from 1888 to 1898, and averages for the ten years 1888-97,	18
" XII.—Number of Milch Cows in each year from 1894 to 1898,	19
Bears kept for Breeding Purposes,	19

Dairy Industry,	19
TABLE XIII.—Showing the number of Dairy Factories and Condensed Milk Factories in 1898, with number of Milk Separators in use, the number of hands permanently employed, the quantity of Butter, Cream, &c., produced, and other details,	20
Diseases of Animals,	21
Exports and Imports of Live Stock,	21
TABLE XIV.—Exports of Live Stock from Ireland to Great Britain in the 24 years, 1875-98,	22
Honey produced in 1897,	22
TABLE XV.—Showing for each of the eleven years, 1887-97, the quantity of Honey produced in Ireland, &c., &c.,	23
Number of Scutching Mills, and Number of Stocks,	23
TABLE XVI.—Number of Scutching Mills in 1898, classified according to the Number of Stocks in each Mill, and the Power used in working them, with the total number of Stocks in each County,	24
Number of Corn Mills,	24
TABLE XVII.—Number of Corn Mills in 1898, by Counties and Provinces, classified according to the Power used, the kind of Corn chiefly ground, &c., &c.,	25
Silos and Ensilage,	26
TABLE XVIII.—Showing, by Counties and Provinces, the Number of Silos or Stocks, &c., &c.,	26
Forestry Operations,	26
Wages of Agricultural Labourers,	27
TABLE XIX.—Labourers' Wages in Ireland by Constabulary Districts,	27

DETAILED TABLES.

TILLAGE; MEADOW AND CLOVER; &c. :

TABLE 1.—Number of Holdings, their Size in Statute Acres, and the Division of Land in each County and Province in 1838,	Page
" 2.—Proportion per cent. of Total Area under Crops, Grass, Fallow, Woods and Plantations, Turf Bog, Marsh, Barren Mountain Land, and Water, Roads, Fences, &c., in each County and Province, in 1838,	34
" 3.—Number of Holdings, their Size in Statute Acres, and the Division of Land in 1838, by Poor Law Unions,	34
" 4.—Proportion per cent. under Crops, Grass, Fallow, &c., by Poor Law Unions, in 1838,	35
" 5.—Extent of Land under Crops in 1838, Valuation in 1838, and Population in 1834, by Counties and Provinces,	37
" 6.—Produce of the Crops in 1838, by Counties and Provinces,	38
" 7.—Extent of Land under Crops in 1838, Valuation in 1838, and Population in 1831, by Poor Law Unions,	40
" 8.—Produce of the Crops in 1838, by Poor Law Unions,	42
" 9.—Number of Holdings exceeding One Acre, and the extent of Land under Crops in each year, from 1839 to 1838, by Counties and Provinces,	46
" 10.—Average Rate of Produce of Crops per Statute Acre, in each year from 1839 to 1838, by Counties and Provinces,	50
	55

LIVE STOCK :

" 11.—Number of Stockholders, and Quantity of Live Stock in 1838, by Counties and Provinces,	60
" 12.—Number of Stockholders and Quantity of Live Stock in 1838, by Poor Law Unions,	61
" 13.—The Quantity of Live Stock in each year from 1839 to 1838, by Counties and Provinces,	65

" 14.—Total Area under Potatoes, and the Extent in Statute Acres under each description of that Crop planted in 1838, by Counties and Provinces,	70
" 15.—Total Area under Potatoes, and the Extent planted of each description of that Crop in 1838, by Poor Law Unions,	71
" 16.—The Average Rate of Produce per Acre of each description of Potato planted in Ireland in 1838, by Counties,	73
" 17.—Number of Boars kept for Breeding Purposes in Ireland in 1838,	74

APPENDIX.

DETAILS RESPECTING SILKS AND ENGLISHES FURNISHED BY OWNERS AND OCCUPIERS OF LAND,	76
ABSTRACT OF THE METEOROLOGICAL OBSERVATIONS registered at the Ordnance Survey Office, Phoenix Park, Dublin, during the year 1838,	82
REMARKS ON THE WEATHER OF THE YEAR 1838, by J. W. Moore, Esq., M.D., F.R.C.S., with Summary Tables of Meteorological Observations for the twenty-one years, 1818-38,	8

AGRICULTURAL STATISTICS OF IRELAND, FOR THE YEAR 1898.

TO HIS EXCELLENCY GEORGE HENRY, EARL CADOGAN, K.G.,

Esq.,

Esq.,

Esq.,

LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR OF IRELAND.

MAY IT PLEASE YOUR EXCELLENCY,

I have the honour to submit to your Excellency the following Report and detailed Tables concerning Agriculture in Ireland for the year 1898.

A review of the detailed Tables confirms the observations I made when submitting the General Abstracts in August, 1898, and the Produce Returns in February last.

DIVISION OF LAND, TILLAGE, &c.

The acreage under Crops, Grass, Fallow, Woods and Plantations, and Bog, Waste, Water, &c., in 1897 and 1898, was as follows:—

Division of
land, 1897
and 1898.

—	1897.	1898.	Increase or Decrease between 1897 and 1898.	
			Increase	Decrease
Under Crops, including Meadow and Clover, . . .	Acres 4,745,606	Acres 4,704,809	Acres. —	Acres. 40,740
“ Grass, or Pasture,	10,462,316	10,470,119	7,803	—
“ Fallow,	19,973	16,839	—	3,136
“ Woods and Plantations,	307,441	307,661	220	—
“ Bog, Waste, Water, &c.,*	4,798,612	4,833,865	35,253	—
Total,†	20,333,344	20,333,344	—	—

The area under Crops in 1898, compared with 1897, shows a net decrease of 40,146 acres—there being a decrease of 38,474 acres in tillage, and of 16,584 acres in the area under hay from permanent pasture or grass not broken up in rotation, with an increase of 14,912 acres in the extent under hay from clover, sainfoin, and grasses under rotation. There is an increase of 7,809 acres in the area under grass not for hay; a decrease of 3,136 acres of Fallow land; an increase of 220 acres under Woods and Plantations; and an increase of 35,253 acres under Bog, Waste, Water, &c.

Of the 4,833,865 acres given as under “Bog, Waste, Water, &c.,” in 1898, 1,180,705 acres were enumerated as “Turf Bog,” 407,382 acres as “Marsh,” 2,280,099 acres as “Barren Mountain Land,” and 963,679 acres as “Water, Roads, Fences, &c.” Compared with 1897, “Bog and Marsh” appears to have increased by 10,879 acres, and “Barren Mountain Land” by 15,969 acres.

The area and proportionate extent of each crop in 1897 and 1898, with the increase or decrease in the latter year, are given in the following Table (I.), from which it appears that, compared with 1897, there was, last year, a net decrease of 16,926 acres, or 1·2 per cent. in cereals, as an increase of 3,563 acres in wheat and 430 acres in beans and pease, was accompanied by a decrease of 9,759 acres in oats, of 12,492 acres in barley, and of 668 acres in bere and rye.

Acreage
under crops,
1897 and
1898.

In green crops there was a net decrease of 10,480 acres, or 0·9 per cent., as potatoes decreased by 12,352 acres, turnips by 2,637 acres, and vetches and rape by 1,691 acres, while the only increases were 1,306 acres in mangel wurzel and beet root, 3,688 acres in cabbage, and 606 acres in “other green crops.”

Flax shows a decrease of 11,068 acres, or 24·3 per cent., and meadow and clover a decrease of 1,672 acres, or 0·1 per cent.

In 1898, 29·6 acres in every 100 under crops were under cereals, 23·5 under green crops, 0·7 under flax, and 46·2 under meadow and clover.

* Including 120,601 acres under water.

† Exclusive of 466,250 acres under the larger rivers, lakes, and tideways.

Varieties of
Potatoes.

It will be observed from Table 14, page 70, that of the 664,864 acres planted with potatoes, 70·0 per cent. were under "Champions," 7·6 per cent. under Flounders, 4·7 per cent. under Irish Whites, 4·0 per cent. under Beauties of Bute, 3·7 per cent. under Magnum Bonums, 3·5 per cent. under Sutton's Abundance, 1·7 per cent. under Skerry Blues, and 4·8 per cent. under all other varieties. The percentage under Champions, although still very large, has declined gradually during the last seven years.

Table 16 points out the best potato-growing districts in Ireland, and the varieties which appear to thrive best in particular counties.

Of the total extent under crops in 1898, 85·1 per cent., or over five-sixths, were under three crops—oats (24·8 per cent.), potatoes (14·1), and meadow and clover (46·2).

Extent
under
Crops.

(TABLE I).—The Acreage under Crops in 1897 and 1898, and the Increase or Decrease in the latter year :—

Crops.	1897.	1898.	Increase in 1898		Decrease in 1898.	
			Extent.	Per Centage.	Extent.	Per Centage.
Wheat,	47,235	52,798	5,563	11·6	—	—
Oats,	1,175,118	1,165,359	—	—	9,759	0·8
Barley,	170,504	158,012	—	—	12,492	7·3
Bere and Rye,	18,206	12,538	—	—	5,668	3·1
Beans and Pease,	1,817	2,947	430	33·7	—	—
TOTAL EXTENT UNDER CEREAL CROPS,	1,407,880	1,380,954	—	—	16,935	1·2
Potatoes,	677,216	664,864	—	—	12,352	1·8
Turnips,	308,565	306,229	—	—	2,336	0·7
Mangel Wurzels and Beet Root,	54,643	55,935	1,292	2·4	—	—
Cabbages,	40,037	44,265	4,228	10·6	—	—
Vegetables and Rape,	9,945	8,204	—	—	1,741	17·0
Carrots, Parsnips, and other Green Crops,	24,074	24,680	606	2·5	—	—
TOTAL EXTENT UNDER GREEN CROPS,	1,115,447	1,104,567	—	—	10,880	0·9
Flax,	45,537	34,469	—	—	11,068	24·3
TOTAL UNDER TILLAGE,	2,568,864	2,520,310	—	—	48,554	1·9
Meadow and Clover :— Clover, Sainfoin, and Grasses under Rotation, Permanent Pasture or Grass not broken up in Rotation,	637,128 1,639,014	632,040 1,522,430	5,088 —	0·8 —	— 116,584	— 7·1
TOTAL EXTENT UNDER CROPS,	4,745,005	4,704,860	—	—	40,146	0·8

The Proportionate Area under each Crop in 1897 and 1898 :—

Crops.	Proportion per cent.		Crops.	Proportion per cent.	
	1897.	1898.		1897.	1898.
Wheat,	1·0	1·1	Cabbages,	0·9	1·0
Oats,	24·8	24·8	Vegetables and Rape,	0·2	0·2
Barley,	3·6	3·4	Carrots, Parsnips, and other Green Crops,	0·5	0·5
Bere and Rye,	0·3	0·3			
Beans and Pease,	—	—	UNDER GREEN CROPS,	23·5	22·6
UNDER CEREAL CROPS,	29·7	29·6	Flax,	0·9	0·7
Potatoes,	14·3	14·1	Meadow and Clover,	45·9	46·2
Turnips,	6·5	6·5			
Mangel Wurzels and Beet Root,	1·1	1·2	Total,	100·0	100·0

Tables showing the extent of land under crops in 1898 by Counties and Provinces, and by Poor Law Unions, and from 1889 to 1898 by Counties and Provinces, are given at pages 38, 42, and 50, respectively.

The extent of land under grass in 1898 (*exclusive of that under meadows and clover for hay*) was 10,470,119 acres, or 51·5 in every 100 of the entire country: or 7,809 acres over the extent in 1897. Of the 10,470,119 acres under grass, not for hay, last year 601,016 were under clover, sainfoin and grasses under rotation, and 9,869,103 under permanent pasture or grass not broken up in rotation. The relative proportions under grass (pasture) in each Province were—in Leinster 56·3 per cent. in 1898, and 56·2 per cent. in 1897; Munster 55·2 per cent. in 1898, and 55·1 per cent. in 1897; Connaught 45·3 per cent. in 1898, and 50·2 per cent. in 1897; and Ulster 44·7 per cent. in 1898, and 44·0 in 1897.

Grazing Land, 1897 and 1898.

Thus, in 1898 there was in Leinster an increase of pasture land, equivalent to 0·1 per cent. of the total area of the province, in Munster an increase of 0·1 per cent., in Connaught a decrease of 0·9 per cent., and in Ulster an increase of 0·7 per cent.

Of the counties—Clare, Kildare, Kilkenny, Limerick, Meath, and Westmeath had each 60 acres or upwards in every 100 of their entire area under grass (pasture) in 1898; Cavan, Fermanagh, Leitrim, Longford, Roscommon, and Tipperary, had above 55 and under 60 acres; Carlow, Cork, Dublin, Monaghan, Queen's, Sligo, Waterford, and Wexford, had from 50 to 55 acres; Antrim, Armagh, Down, Galway, Kerry, King's, Londonderry, Louth, Mayo, Tyrone, and Wicklow had above 40 and under 50 acres; while only 35·5 per cent. of the total area of Donegal was enumerated in 1898 as under grass. Meath shows the highest percentage, 71·4.

Grazing Land in 1898.

The area of each County and Province, and the extent and percentage under grass in 1898, are given at page 34.

As already stated, the land under grass (pasture) in 1898 formed a little more than half of the total area (20,333,344 statute acres) of the country. It will be observed from the succeeding Table (Table II.) that the area under grass in 1893 was somewhat in excess of the average for the preceding ten years, and greater than the extent in any of these years.

Division of Land, 1888-1898.

In Cereal Crops a continuous decrease is shown for all the years covered by the Table, except 1892, in which there was a slight increase as compared with the extent for the year immediately preceding. The average area under cereals in the ten years 1888-97 was 1,484,955 acres, and the extent in 1898 was 1,390,954 acres, being a decline of 94,001 acres or 6·3 per cent.

The average area under Green Crops in the ten years was 1,176,655 acres, and in 1898 the area was 1,104,967 acres, being 71,688 acres or 6·1 per cent. under the average. The extent under Green Crops in 1897 was 1,115,447 acres.

The area under Flax, after having risen from 67,487 acres in 1893 to 101,081 acres in 1894, fell to 95,203 acres in 1895, to 72,253 acres in 1896, to 45,537 acres in 1897, and to 34,469 acres in 1898, which extent shows a decrease of 50,634 acres, or 59·5 per cent. as compared with the average for the ten years 1888-97.

There were 2,176,142 acres under Meadow and Clover in 1897, and 2,174,470 acres in 1898; the average extent for the ten years 1888-97 was 2,162,859 acres, the yearly extent varying from 2,059,529 acres in 1891 to 2,221,980 acres in 1888.

The extent of Fallow or uncropped arable land in 1898 was 16,839 acres, being a decrease of 3,136 acres as compared with the preceding year, and 1,832 acres under the average extent for the ten years 1888-97.

The area returned under "Bog, Waste, Barren Mountain, Water, &c." in 1898 was 4,833,865 acres, being 35,253 acres more than the corresponding extent for the preceding year, but 27,173 acres below the average for the ten years 1888-97.

[TABLE II.]

Division of Land. TABLE II.—The Extent of Land in Statute Acres, and the proportional Area, under Cereal Crops, Green Crops, Flax, Meadow and Clover, Grass, Woods and Plantations, Fallow, Bog, Waste, Water, &c., in each Year from 1888 to 1898, with averages for the ten years, 1888-97; also the Number of Holdings exceeding 1 acre.

EXTENT OF LAND IN STATUTE ACRES UNDER												Total.*
Year.	Number of Holdings exceeding 1 Acre.	Cereal Crops.	Green Crops.	Flax.	Meadow and Clover.	Grass (Pasture).	All Land under Agriculture.	Woods and Plantations.	Fallow.	Bog, Waste, Roads, &c.		
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		
1888.	514,501	1,570,965	1,994,145	113,653	2,221,968	3,905,657	15,043,760	331,587	16,633	4,505,723*		
1889.	516,516	1,856,990	1,223,749	113,692	2,187,578	3,908,397	15,454,324	326,695	15,490	4,332,054*		
1890.	522,596	1,734,794	1,191,452	96,890	3,493,634	10,312,556	16,131,982	327,631	14,505	4,465,715*		
1891.	517,517	1,432,783	1,191,454	74,655	2,050,339	10,295,054	14,117,555	312,554	31,800	4,383,199		
1892.	516,545	1,694,585	1,174,900	70,617	2,142,830	10,133,884	13,125,322	309,596	24,358	4,302,528		
1893.	515,545	1,650,373	1,168,708	67,487	2,167,873	10,121,167	13,146,167	307,360	19,668	4,226,330		
1894.	515,900	1,651,237	1,162,255	101,681	2,169,336	10,714,694	13,369,551	308,928	19,668	4,301,038		
1895.	516,278	1,679,094	1,154,734	95,980	2,194,670	10,296,434	13,369,551	308,928	19,441	4,283,644		
1896.	514,807	1,420,929	1,167,231	72,253	2,304,454	10,333,327	13,378,747	307,447	18,280	4,260,910		
1897.	514,188	1,407,888	1,115,447	46,537	2,176,148	10,462,310	13,297,398	307,441	19,975	4,798,512		
Average	515,307	1,684,936	1,175,655	85,393	2,169,839	10,297,593	13,157,531	314,726	18,971	4,301,038		
1888-97.												
1898.	514,201	1,680,866	1,104,307	31,860	2,174,420	10,459,119	13,174,079	307,681	16,830	4,893,905		
Year.	in	Proportion per Cent. Under									Total	
		Cereal Crops.	Green Crops.	Flax.	Meadow and Clover.	Grass (Pasture).	All Land under Agriculture.	Woods and Plantations.	Fallow.	Bog, Waste, Roads, &c.		
1888.	-	7.7	6.1	0.6	10.9	49.7	74.0	1.6	0.1	24.3		
1889.	-	7.5	6.0	0.6	10.7	49.2	74.0	1.6	0.1	24.0		
1890.	-	7.4	6.0	0.5	10.6	49.7	74.4	1.6	0.1	23.9		
1891.	-	7.3	5.9	0.4	10.4	49.7	74.4	1.5	0.1	23.9		
1892.	-	7.4	5.8	0.4	10.6	49.4	74.5	1.5	0.1	23.9		
1893.	-	7.3	5.7	0.4	10.7	49.4	74.6	1.5	0.1	23.9		
1894.	-	7.3	5.7	0.5	10.6	49.2	74.4	1.5	0.1	23.6		
1895.	-	7.4	5.6	0.5	10.8	50.0	74.6	1.5	0.1	23.9		
1896.	-	7.3	5.6	0.4	10.6	49.8	74.6	1.5	0.1	23.8		
1897.	-	7.3	5.5	0.2	10.7	51.5	74.8	1.5	0.1	23.6		
Average												
1888-97.	-	7.3	5.8	0.4	10.6	50.3	74.4	1.5	0.1	23.9		
1898.	-	6.6	5.4	0.2	10.7	51.6	74.6	1.5	0.1	23.6		

Turf Bog.

Tables showing the extent and the proportionate area under Crops, Grass, Fallow, Woods and Plantations, Turf Bog, Marsh, Barren Mountain Land, and Water, Roads, Fences, &c., in 1898, by counties and provinces, will be found at page 24. From these it appears that there are three counties with upwards of 100,000 acres under "Turf Bog," viz.:—Mayo, with 367,820 acres, or 20.3 per cent. of its entire area; Galway, 139,761 acres, or 9.3 per cent.; and Donegal, 110,341 acres, or 9.3 per cent. No "Turf Bog" is returned for Dublin, and of the other counties the following are those having the smallest areas under that heading, viz.:—Louth, 871 acres, or 0.1 per cent. of its entire area; Carlow, 894 acres, or 0.4 per cent.; Wexford, 1,178 acres, or 0.2 per cent.; Waterford, 2,327 acres, or 0.5 per cent.; Down, 2,487 acres, or 0.4 per cent.; Kilkenny, 2,783 acres, or 0.5 per cent.; and Wicklow, 5,665 acres, or 1.1 per cent. In the province of Connaught, 531,262 acres, being 12.5 per cent. of its entire area, are returned as under "Turf Bog," including 68,603 acres, or 11.7 per cent. of the County of Roscommon, in addition to the large extent in Mayo and Galway as mentioned above. In Cork, 66,625 acres, or 3.6 per cent. of the area of the county are under Marsh; in Galway, 56,384 acres, or 3.8 per cent.; in Mayo, 47,652 acres, or 3.6 per cent.; in Kerry, 42,808 acres, or 3.7 per cent., and in Donegal, 33,964 acres, or 2.8 per cent. The counties with the smallest area under "Marsh" are, Dublin with 541 acres, or 0.2 per cent. of its entire area; Monaghan, 1,524 acres, or 0.5 per cent.; Louth, 1,543 acres, or 0.8 per cent.; Meath, 2,201 acres, or 0.4 per cent.; Armagh, 2,338 acres, or 0.7 per cent.; Fermanagh, 2,481 acres, or 0.6 per cent.; and Carlow, 2,730 acres, or 1.2 per cent.

* The total area adopted for the years 1888-90, is 20,328,703 acres.

The following statement shows in a concise manner the extent of Meadow and Clover and Pasture, respectively, in Ireland during the 11 years, 1888-98, and the average extents for the 10 years, 1888-97:—

Year.	Meadow and Clover.	Pasture.	Total Grass Land.
	Acres.	Acres.	Acres.
1888,	2,221,980	9,903,097	12,127,077
1889,	2,187,523	9,958,997	12,146,520
1890,	2,043,634	10,212,256	12,255,890
1891,	2,039,529	10,298,554	12,338,083
1892,	2,142,810	10,253,824	12,396,634
1893,	2,167,473	10,321,107	12,488,580
1894,	2,182,598	10,314,086	12,496,684
1895,	2,194,476	10,380,424	12,574,900
1896,	2,202,424	10,333,597	12,536,021
1897,	2,176,142	10,462,310	12,638,452
Average, 1888-97, .	2,163,839	10,327,959	12,491,798
1898,	2,174,470	10,470,119	12,644,589

It will be observed that the total area of grass lands has increased from 12,127,077 acres in 1888 to 12,644,589 acres in 1898, being an increase of 517,512 acres or 4·3 per cent. However, it will be seen further on in this Report that cattle and sheep, although not as numerous as in some of the intervening years, have increased since 1888 in a much greater ratio than the pasture lands, showing that the latter are more fully stocked than they were 11 years ago.

"Barren Mountain Land" covers an area of 100,000 acres and upwards in each of the following seven counties, viz.:—Donegal, 340,219 acres, or 28·6 per cent. of its entire area; Kerry, 307,688 acres, or 26·5 per cent.; Galway, 261,820 acres, or 17·4 per cent.; Cork, 211,373 acres, or 13·1 per cent.; Mayo, 229,338 acres, or 17·4 per cent.; Wicklow, 123,938 acres, or 24·8 per cent.; and Tyrone, 113,959 acres, or 14·5 per cent.

8·9 per cent. (57,135 acres) of Antrim, 14·4 per cent. (64,890 acres) of Sligo, 6·6 per cent. (69,214 acres) of Tipperary, 16·1 per cent. (73,576 acres) of Waterford, 14·8 per cent. (75,986 acres) of Londonderry, and 10·1 per cent. (77,791 acres) of Clare are under "Barren Mountain Land." The counties containing the smallest areas under "Barren Mountain Land" are Meath with 542 acres, or 0·1 per cent. of its entire area; Longford, 691 acres, or 0·3 per cent.; Westmeath, 967 acres, or 0·2 per cent.; Monaghan, 1,085 acres, or 0·3 per cent.; and Kildare, 1,359 acres, or 0·3 per cent. Only 224,106 acres, or 4·6 per cent. of Leinster are returned as being under "Barren Mountain Land," while 793,610 acres, or 13·4 per cent. of Munster; 670,470 acres, or 12·6 per cent. of Ulster; and 591,913 acres or 14·0 per cent. of Connaught are so returned.*

965,679 acres (including 129,681 acres under water), or 4·7 per cent. of the entire area of the country, were returned in 1898 as "Water, Roads, Fences, &c." In the counties the highest percentage is 7·9 in Cavan, and the lowest 3·3 in Wicklow.

These figures do not include the acreage under the larger rivers, lakes, and tideways.

See note (t), page 5.

A table showing the division of land by Poor Law Unions is given at pages 35 and 36.

With reference to the question whether waste land is increasing or decreasing in Ireland, the following from Part I. of Dr. Grimeshaw's "Facts and Figures about Ireland" (Hodges, Figgis & Co., Limited, Dublin, 1893) may be of interest. It shows that an immense amount of waste land was reclaimed during the fifty years, 1842-91.

"DIVISION OF LAND IN 1841, '51, '61, '71, '81, AND 1891.

Division of Land.	1841.	1851.	1861.	1871.	1881.	1891.
	Statute Acres.	Statute Acres.	Statute Acres.	Statute Acres.	Statute Acres.	Statute Acres.
Under Crops (including Meadows).	13,894,360	8,394,251	8,394,251	8,394,251	8,394,251	8,394,251
Grass.	215,492	8,764,077	9,300,339	10,011,285	10,011,285	10,011,285
Woods and Plantations.	215,492	264,297	316,307	324,300	324,300	324,300
Barren Mountain Land.	—	—	—	—	—	—
Est. and Marsh.	—	—	—	—	—	—
Water Land, &c.	—	—	—	—	—	—
Total.	—	—	—	—	—	—

Note.—The information for 1841 and 1851, respectively, has been obtained from the Census Reports for those years, and that for the other years from the Agricultural Statistics.

* The difference between the total area returned for 1891 and that given for the other years is owing to the adoption in 1891 of revised areas for some counties, and the inclusion of some islands in the County of Wexford.

NUMBER OF HOLDINGS AND NUMBER OF OCCUPIERS.

Number and
size of
Holdings,
1897 and
1898.

According to the returns for 1898, the number of separate holdings was 577,962, being 987 more than in the previous year. The holdings which *decreased* in number were—those “above 1 and not exceeding 5 acres” by 214; those “above 5 and not exceeding 15 acres” by 623; those “above 50 and not exceeding 50 acres” by 10; those “above 50 and not exceeding 100 acres” by 49; those “above 100 and not exceeding 200 acres” by 16; those “above 200 and not exceeding 500 acres” by 57; and those “above 500 acres” by 7. The holdings which *increased* in number were those not exceeding 1 acre by 1,522; and those “above 15 and not exceeding 30 acres” by 441.

Size of Holdings.	Number in 1897	Number in 1898	Increase or Decrease in 1898.	
			Increase.	Decrease.
Not exceeding 1 Acre,	62,189	63,711	1,522	—
Above 1 and not exceeding 5 Acres,	61,030	61,816	—	214
“ 5 “ “ 15 “ “	155,054	154,441	—	623
“ 15 “ “ 30 “ “	183,308	184,749	441	—
“ 30 “ “ 50 “ “	74,081	74,071	—	10
“ 50 “ “ 100 “ “	57,454	57,405	—	49
“ 100 “ “ 200 “ “	23,041	23,025	—	16
“ 200 “ “ 500 “ “	8,245	8,188	—	57
Above 500 Acres,	1,563	1,536	—	7
Total,	576,975	577,962	987	—

A table showing the number of holdings, by classes, for each Poor Law Union, in 1896, will be found on pp. 35 and 36.

The number of separate holdings in each county and province, in 1897 and 1898, is given by classes in Table III. on the opposite page.

Number of
separate
Holdings
and of
Occupiers,
1897 and
1898.

As in many instances landholders occupy more than one farm, and as, in other cases, farms extend into two or more townlands—the portion in each townland being *enumerated and classified as a separate holding*—it has been considered desirable, with the view of ascertaining the number of *Occupiers*, and of classifying them according to the total extent of land held by each, to obtain a Return of the number of persons having more than one farm or holding. Each Enumerator is, therefore, required to furnish the name of every landholder residing in his district who has two or more farms, or whose farm extends into two or more townlands, together with the area of each portion, and the locality in which it is situated. The number of actual occupiers in 1898 thus arrived at is given in Table IV., page 12, by counties and provinces. On comparing the results in this Table with the figures given in Table III., it appears that in 1898 there were 577,962 holdings in the hands of 535,358 occupiers.

The number of separate holdings and the number of occupiers in each Province, in 1897 and 1898, respectively, were :—

Provinces.	Number of Separate Holdings.		Number of Occupiers.	
	1897.	1898.	1897	1898.
Leinster, . . .	125,345	125,934	112,722	113,087
Munster, . . .	128,300	129,780	117,175	117,974
Ulster, . . .	200,009	199,494	187,963	187,837
Connacht, . . .	122,491	122,754	115,694	115,860
TOTAL, . . .	576,975	577,962	535,514	535,358

The number of occupiers of land returned in 1898 was 535,358, being 1,844 more than in the previous year. Excluding those holding land “not exceeding one acre,” who are to a great extent merely occupiers of small gardens, they numbered 472,364 in 1898, or 287 more than in 1897. There was an increase in Munster of 97—from 99,950 in 1897 to 100,047 in 1898; in Connacht of 43—from 109,520 in 1897 to 109,563 in 1898; and in Leinster of 152—from 91,945 in 1897 to 92,097 in 1898; and a decrease in Ulster of 5—from 170,662 in 1897 to 170,657 in 1898. There was an increase of 191 in occupiers holding land above 1 and not exceeding 50 acres, and the number holding land exceeding the latter acreage increased by 96.

TABLE III.—The number of Holdings, by classes, for each County and Province, in 1897 and 1898, and the increase or decrease in the latter year:—

Number and size of Holdings, 1897 and 1898.

Tenures and Classification of Holdings.											
COUNTIES.	not recording 1 acre & 2	above 1 and not exceeding 5 acres	above 5 and not exceeding 10 acres	above 10 and not exceeding 20 acres	above 20 and not exceeding 30 acres	above 30 and not exceeding 50 acres	above 50 and not exceeding 100 acres	above 100 and not exceeding 200 acres	above 200 and not exceeding 500 acres	above 500 acres	TOTAL.
ANTRIM.	1897 1,581	1,581	5,777	5,946	3,696	2,330	896	166	47	29,663	
	1898 2,180	1,945	5,811	9,370	3,650	2,355	872	151	47	29,160	
ARMAGH.	1897 1,269	2,655	2,234	4,918	1,420	344	34	20	5	20,078	
	1898 1,014	2,080	5,570	4,276	1,450	580	99	19	2	20,000	
CARLOW.	1897 1,354	624	810	1,801	238	840	340	110	7	5,790	
	1898 1,224	620	606	964	670	842	740	110	7	5,801	
CATY.	1897 1,040	1,411	6,840	6,540	3,441	843	215	45	5	28,816	
	1898 1,064	1,440	6,870	6,840	3,441	843	221	42	5	28,811	
CLARE.	1897 1,404	1,300	7,115	4,050	4,051	2,745	887	540	53	35,545	
	1898 1,015	1,540	3,140	4,790	3,090	2,700	925	441	53	18,476	
COKE.	1897 5,631	2,405	4,075	6,475	6,611	7,665	3,590	777	71	37,230	
	1898 5,599	2,407	4,077	6,469	6,555	7,544	3,544	750	76	37,791	
DOUGAL.	1897 1,520	2,520	10,161	6,413	4,081	5,284	3,033	244	100	51,773	
	1898 1,410	2,460	10,340	6,492	4,092	3,103	1,025	310	100	31,679	
DUBLIN.	1897 5,250	3,441	5,061	6,947	5,181	1,722	345	23	23	30,470	
	1898 5,007	3,540	8,340	6,542	3,147	1,744	340	58	22	40,006	
DUNLIS.	1897 3,730	1,654	1,624	974	600	620	300	130	17	10,784	
	1898 2,861	1,339	1,611	607	612	617	409	144	13	6,004	
FERRISBURGH.	1897 795	1,657	3,470	4,171	3,355	1,278	340	86	17	13,520	
	1898 790	1,641	4,400	4,212	2,330	1,300	447	47	12	13,547	
GALWAY.	1897 1,594	4,672	10,243	6,237	3,465	9,163	1,491	660	223	58,150	
	1898 5,054	4,561	12,781	9,807	5,575	2,280	1,240	980	224	36,719	
KERRY.	1897 1,594	1,794	3,027	3,027	3,090	3,090	1,065	600	113	38,450	
	1898 1,694	2,884	3,102	3,400	3,610	4,030	1,713	500	118	28,792	
KILDARE.	1897 1,492	1,644	1,541	1,545	880	980	777	360	20	8,789	
	1898 1,467	1,506	1,671	1,130	745	505	505	347	44	6,743	
KILKENNY.	1897 1,265	1,081	2,507	2,410	5,110	5,005	794	200	36	15,047	
	1898 2,007	1,080	2,002	2,403	3,171	2,104	700	211	15	14,000	
KNOX.	1897 1,714	1,620	2,007	2,003	1,681	1,138	514	535	22	11,038	
	1898 1,230	1,402	5,204	3,947	1,371	1,125	300	561	22	14,157	
LATER.	1897 541	406	5,126	5,241	1,200	637	305	41	6	14,474	
	1898 601	445	5,194	5,274	1,315	601	150	40	5	14,536	
LIMERICK.	1897 5,569	1,771	2,383	2,581	2,380	2,800	1,640	254	25	17,905	
	1898 5,073	1,701	3,315	3,079	2,006	2,810	1,044	254	30	18,070	
LODGEKERRY.	1897 1,574	1,400	6,284	4,381	4,381	5,434	1,477	420	117	27,770	
	1898 1,540	1,510	5,167	6,582	2,216	1,477	420	117	30	27,170	
LODGEKERRY.	1897 900	620	2,514	5,032	1,160	571	181	66	3	8,900	
	1898 900	619	2,547	5,031	1,160	569	187	79	3	8,941	
LETTER & DROGHEDA.	1897 1,903	1,707	3,300	1,400	500	482	265	119	13	9,442	
Co. of Town.	1898 1,405	1,200	2,405	1,400	600	470	225	113	12	8,414	
MAID.	1897 1,502	3,303	15,274	6,093	2,919	1,204	780	498	188	30,305	
	1898 1,505	4,694	17,106	9,525	5,030	1,570	791	439	189	36,351	
MEATH.	1897 2,404	1,770	2,801	1,510	1,137	1,304	855	567	54	24,406	
	1898 2,754	1,234	2,500	1,900	1,100	1,200	500	361	30	12,900	
MONTAGUE.	1897 830	1,960	7,402	4,000	1,300	700	111	35	4	17,341	
	1898 800	1,000	7,410	4,010	1,310	554	112	32	4	17,345	
QUINN.	1897 1,591	1,585	5,290	2,020	1,310	1,310	202	264	36	11,102	
	1898 1,591	1,585	5,290	2,020	1,310	1,310	202	264	36	11,102	
ROCKFORD.	1897 1,591	1,585	5,290	2,020	1,310	1,310	202	264	36	11,102	
	1898 1,591	1,585	5,290	2,020	1,310	1,310	202	264	36	11,102	
SLIGO.	1897 901	1,472	3,791	4,491	1,635	797	309	222	35	15,596	
	1898 901	1,466	3,772	4,545	1,630	892	303	230	35	15,082	
TIPPERARY.	1897 2,040	2,661	4,480	4,704	4,912	3,304	1,400	606	88	24,395	
	1898 2,030	2,659	4,504	4,702	4,890	4,410	1,402	900	80	24,395	
TYRONE.	1897 2,040	2,661	4,480	4,704	4,912	3,304	1,400	606	88	24,395	
	1898 2,120	2,424	7,541	7,015	4,074	3,445	571	167	30	22,422	
WATERFORD.	1897 2,553	2,322	1,407	1,375	1,313	1,063	300	230	90	10,634	
	1898 2,270	1,100	1,490	1,615	1,306	1,472	820	230	94	10,207	
WEXFORD.	1897 1,900	1,742	5,480	3,125	1,300	1,000	543	203	48	11,232	
	1898 1,907	1,806	2,270	1,124	1,124	1,000	548	203	48	11,291	
WICK.	1897 2,124	2,361	4,144	3,014	3,061	3,463	990	163	17	16,661	
	1898 2,127	2,369	4,030	3,004	3,060	3,440	975	170	17	16,669	
WOLFE.	1897 1,853	930	1,200	1,241	1,100	1,000	720	270	67	8,505	
	1898 1,867	937	1,203	1,264	1,102	1,000	719	264	71	8,510	

SUMMARY OF IRELAND.

PROVINCES.	1897	1898	1897	1898	1897	1898	1897	1898	1897	1898	1897	1898
LEINSTER.	21,645	17,630	35,411	21,696	15,130	14,910	6,804	3,914	415	123,240	123,240	123,240
MUNSTER.	21,696	17,630	35,411	21,696	15,130	14,910	6,804	3,914	415	123,240	123,240	123,240
ULSTER.	21,696	17,630	35,411	21,696	15,130	14,910	6,804	3,914	415	123,240	123,240	123,240
CONNAUGHT.	21,696	17,630	35,411	21,696	15,130	14,910	6,804	3,914	415	123,240	123,240	123,240
TOTAL OF IRELAND.	82,189	62,008	135,844	132,380	74,081	74,081	29,419	15,845	1,562	478,953	478,953	478,953
INCREASE OR DECREASE IN 1898.	INCREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.	DECREASE.
	1,522	214	803	441	89	69	16	57	7	100	100	100

* Some of the Counties appearing in the summary of Holdings of this size are due to a difference of interpretation by the Returners of the term "Agricultural Holding" as to what is regarded as a small plot or a near town and village.

Number of
Occupiers in
each
County and
Province
in 1898.

TABLE IV.—Return of the number of Occupiers resident in each County and Province in 1898, classified according to the *total extent* of land held, without reference to the Townland, Poor Law Union, County, or Province in which the portions of land are situated:—

COUNTY.	NUMBER OF OCCUPIERS RESIDING LAND										TOTAL.
	Not exceeding 1 Acre.	Above 1 and not exceeding 5 Acres.	Above 5 and not exceeding 10 Acres.	Above 10 and not exceeding 20 Acres.	Above 20 and not exceeding 50 Acres.	Above 50 and not exceeding 100 Acres.	Above 100 and not exceeding 200 Acres.	Above 200 and not exceeding 500 Acres.	Above 500 Acres.		
Armagh,	2,120	1,080	4,777	8,568	2,389	2,379	649	163	55	20,711	
Armagh,	1,053	2,483	7,714	3,093	1,567	611	137	39	5	16,967	
Carlow,	1,396	946	709	615	725	775	229	129	19	5,269	
Cavan,	1,069	1,299	6,299	6,080	2,465	670	217	69	8	12,755	
Clon,	1,179	1,033	2,279	4,903	2,229	2,666	989	298	87	16,576	
Cork,	2,464	2,137	2,941	3,680	5,728	2,393	2,383	326	125	24,625	
Down,	2,280	2,285	4,999	8,341	3,817	2,042	1,659	381	113	28,952	
Dublin,	4,791	2,483	8,911	3,867	2,805	1,821	412	54	30	27,749	
Dublin,	2,942	1,819	1,494	724	608	496	347	87	26	13,999	
Fermanagh,	728	874	4,922	8,791	2,126	1,259	296	119	19	12,472	
Galway,	1,974	4,909	11,264	6,647	3,289	2,227	1,193	730	243	33,479	
Kerry,	1,771	1,675	2,914	2,236	2,085	2,729	1,734	419	157	19,527	
Kildare,	1,487	1,369	1,484	992	645	141	609	249	57	7,922	
Edinburgh,	2,026	1,483	1,425	1,886	1,899	1,944	629	275	41	12,967	
King's,	1,699	1,427	1,987	3,790	1,543	999	813	252	79	16,692	
Leinster,	892	793	4,545	5,824	1,799	786	169	47	13	13,999	
Lancashire,	2,026	1,483	1,425	1,886	1,899	1,944	629	275	41	12,967	
Lancashire,	2,026	1,483	1,425	1,886	1,899	1,944	629	275	41	12,967	
London,	894	793	2,438	2,438	1,091	547	176	74	22	6,469	
London and Drighda, Co. of Toms,	1,441	1,299	2,180	1,280	547	416	269	129	24	7,262	
Mery,	1,927	2,438	14,537	8,801	2,889	1,869	637	419	217	34,609	
Meath,	2,277	1,717	2,244	1,879	1,614	1,614	745	490	146	11,249	
Monaghan,	795	1,086	4,296	4,644	1,347	316	120	45	8	16,172	
Queens,	1,792	1,440	1,829	1,791	1,384	1,007	346	276	59	19,602	
Southdown,	929	1,344	7,962	3,628	1,518	845	473	235	67	19,831	
Sligo,	379	5,302	4,519	1,390	751	751	293	123	47	14,444	
Tyrone,	2,307	2,438	3,716	3,716	3,428	1,428	484	537	27	27,572	
Tysons,	2,166	2,389	2,326	1,796	4,944	2,443	1,796	484	537	27,572	
W. of London,	2,307	1,971	1,136	1,092	1,499	1,399	807	299	45	8,147	
Westmorland,	1,969	1,374	2,958	1,996	1,162	532	429	471	67	19,441	
Wicklow,	2,307	2,306	2,326	2,326	2,192	2,960	921	293	34	14,992	
Wicklow,	1,969	741	1,099	1,063	999	1,191	673	293	102	7,148	
SUMMARY OF IRELAND.											
Provinces.											
Leinster,	21,490	16,811	31,768	10,911	14,015	12,391	5,426	2,963	779	112,667	
Munster,	11,267	9,265	15,514	10,993	19,493	20,614	3,297	8,145	599	117,974	
Ulster,	12,199	16,954	24,379	43,601	22,601	14,512	4,367	1,519	216	167,857	
Connaught,	6,697	11,551	42,592	32,719	11,299	9,166	2,792	1,574	634	115,890	
Total of Ireland,	60,894	66,391	129,348	121,174	87,968	57,024	22,917	47,116	2,599	605,498	

Number of
Occupiers of
Land, 1892
to 1898.

The following statement shows the number of occupiers of land in each year from 1892 to 1898, by Provinces:—

PROVINCE.	Number of Occupiers in the Year						
	1892	1893	1894	1895	1896	1897	1898
Leinster,	108,573	109,916	110,183	111,573	111,856	112,722	113,488
Munster,	114,306	115,150	116,094	116,758	117,170	117,175	117,974
Ulster,	188,020	187,616	188,305	187,907	188,337	187,963	187,857
Connaught,	114,574	114,683	115,554	115,575	115,689	115,634	115,890
Ireland,	525,573	527,364	530,136	531,873	533,043	533,514	535,398

Increase or
decrease in
Holdings by
Classes
between
1891 and
1898.

As will be seen from Table V. on the opposite page, the number of holdings "above 1 and not exceeding 5 acres" diminished greatly between 1891 and 1898. In Leinster the decrease was 65.0 per cent.; in Munster 80.7; in Ulster 80.0; in Connaught 87.3; and in all Ireland 80.1 per cent.

In the same period holdings "above 5 and not exceeding 15 acres" also diminished in number; the decrease in all Ireland was 38.9 per cent.; it was—in Leinster 45.1 per cent.; in Munster 69.0; and in Ulster 36.1; while in Connaught these holdings increased 2.3 per cent.

Holdings "above 15 and not exceeding 30 acres" increased 6.2 per cent. in Leinster; 113.0 per cent. in Ulster; and 479.9 per cent. in Connaught; they decreased 12.1 per cent. in Munster. In all Ireland they increased 68.6 per cent.

Holdings "above 30 acres" increased 119·2 per cent. in Leinster; 242·5 in Munster; 360·3 in Ulster; 436·1 in Connaught; and 237·8 per cent. in all Ireland.

The total number of holdings "above 1 acre" decreased between 1841 and 1898 by 22·7 per cent. in Leinster; 31·9 per cent. in Munster; 23·0 in Ulster; and 25·6 in Connaught.

The total number of holdings in Ireland "above 1 acre" was 691,202 in 1841; 570,338 in 1851; 568,484 in 1861; 544,142 in 1871; 526,743 in 1881; 517,012 in 1891; and 514,251 in 1898, showing a decrease of 176,951 or 25·6 per cent. in the period between 1841 and 1898.

TABLE V.—The number of Holdings above 1 acre in each Province in 1841, 1851, 1861, 1871, 1881, 1891, and 1898, according to the classification used by the Census Commissioners of 1841 (in which "above 30 acres" was the maximum); the increase or decrease in the numbers in each class, and the difference per cent., between 1841 and 1898:—

Number of Holdings in 1841, 1851, 1861, 1871, 1881, 1891, and 1898.

SIZE OF HOLDINGS.	Leinster.	Munster.	Ulster.	Connaught.	Total.
	Number.	Number.	Number.	Number.	Number.
Above 1 and not exceeding 5 Acres.	1841, 20,110 1851, 23,711 1861, 23,844 1871, 21,429 1881, 18,304 1891, 18,034 1898, 17,332	1841, 57,857 1851, 14,200 1861, 13,736 1871, 12,392 1881, 11,096 1891, 11,207 1898, 11,174	1841, 102,315 1851, 29,709 1861, 28,438 1871, 24,232 1881, 21,971 1891, 21,267 1898, 20,402	1841, 100,254 1851, 18,463 1861, 19,437 1871, 10,856 1881, 15,200 1891, 12,926 1898, 12,688	1841, 310,436 1851, 86,083 1861, 85,469 1871, 74,890 1881, 67,071 1891, 65,464 1898, 61,816
Decrease in number between 1841 and 1898.	32,538	46,683	81,813	87,566	248,620
Rate per cent.,	65·0	80·7	80·0	87·3	80·1
Above 5 and not exceeding 15 Acres.	1841, 46,039 1851, 33,058 1861, 30,315 1871, 27,275 1881, 26,045 1891, 26,881 1898, 25,538	1841, 61,735 1851, 24,365 1861, 21,939 1871, 20,469 1881, 19,747 1891, 19,254 1898, 19,139	1841, 99,005 1851, 85,176 1861, 82,063 1871, 73,847 1881, 68,362 1891, 64,780 1898, 63,617	1841, 43,402 1851, 49,235 1861, 50,404 1871, 30,032 1881, 49,888 1891, 46,768 1898, 46,434	1841, 252,799 1851, 191,854 1861, 183,931 1871, 171,383 1881, 164,045 1891, 150,661 1898, 154,441
Increase or Decrease in number between 1841 and 1898.	20,781	41,621	35,988	1,632	98,353
Rate per cent.,	45·1	69·0	36·1	3·8	38·9
Above 15 and not exceeding 30 Acres.	1841, 20,688 1851, 26,006 1861, 24,226 1871, 23,445 1881, 22,623 1891, 22,938 1898, 21,990	1841, 27,611 1851, 28,855 1861, 26,805 1871, 25,654 1881, 25,030 1891, 24,368 1898, 24,281	1841, 26,219 1851, 27,651 1861, 27,690 1871, 26,678 1881, 25,227 1891, 23,825 1898, 23,774	1841, 5,824 1851, 28,799 1861, 32,560 1871, 32,702 1881, 32,913 1891, 33,494 1898, 38,773	1841, 79,342 1851, 141,311 1861, 141,351 1871, 138,647 1881, 138,793 1891, 135,947 1898, 133,749
Increase or Decrease in number between 1841 and 1898.	1,292	3,329	28,495	37,949	61,407
Rate per cent.,	6·2	12·1	113·0	479·9	68·6
Above 30 Acres.	1841, 17,943 1851, 38,094 1861, 39,384 1871, 39,631 1881, 39,475 1891, 39,138 1898, 39,338	1841, 16,665 1851, 53,074 1861, 55,838 1871, 56,428 1881, 56,141 1891, 56,518 1898, 57,082	1841, 9,653 1851, 37,813 1861, 39,664 1871, 41,071 1881, 42,510 1891, 44,657 1898, 44,439	1841, 4,362 1851, 29,107 1861, 28,152 1871, 22,275 1881, 21,708 1891, 25,227 1898, 23,880	1841, 48,493 1851, 149,090 1861, 167,833 1871, 159,303 1881, 163,834 1891, 162,940 1898, 166,248
Increase in number between 1841 and 1898.	21,395	40,417	34,784	19,024	115,620
Rate per cent.,	119·2	242·5	360·3	436·1	237·8
TOTAL ABOVE 1 ACRE.	1841, 134,780 1851, 122,871 1861, 116,973 1871, 111,678 1881, 106,930 1891, 105,511 1898, 104,126	1841, 163,886 1851, 129,494 1861, 118,333 1871, 114,783 1881, 112,014 1891, 111,347 1898, 111,670	1841, 236,694 1851, 210,349 1861, 207,635 1871, 195,828 1881, 188,070 1891, 183,229 1898, 182,172	1841, 156,842 1851, 116,624 1861, 129,843 1871, 121,883 1881, 119,709 1891, 116,493 1898, 116,281	1841, 691,202 1851, 570,338 1861, 568,484 1871, 544,142 1881, 526,743 1891, 517,012 1898, 514,251
Decrease in number between 1841 and 1898.	30,652	52,216	54,622	39,561	176,951
Rate per cent.,	22·7	31·9	23·0	25·4	25·6

WOODS AND PLANTATIONS.

Woods and Plantations. In addition to the information regarding the total area under Woods and Plantations, returns were obtained in 1898, showing the proportion of the area entered under this heading occupied by each of the various kinds of trees. According to these Returns 46,693 acres of the total area (307,661 statute acres) under Woods and Plantations last year, were under Larch, 33,642 under Fir, 15,314 under Spruce, 2,914 under Pine, 26,048 under Oak, 8,024 under Ash, 10,265 under Beech, 3,800 under Sycamore, 3,801 under Elm, 3,491 under Other Trees, and 155,388 were returned as under Mixed Trees. The area under Woods and Plantations in Leinster was 93,205 acres, in Munster 104,164 acres, in Ulster 58,168 acres, and in Connaught 52,124 acres.

PRODUCE OF THE CROPS.

Mode of collecting the Returns of Produce. The Tables relating to the produce of the crops have been carefully compiled from information obtained by members of the Royal Irish Constabulary and of the Metropolitan Police from practical farmers and other persons qualified to form an opinion as to the yield in that *Poor Law Electoral Division* for which they were requested to afford the information. The names and residences of the parties so co-operating and assisting are stated by the Enumerators on the Returns.

The Weather. The Weather being a potent factor in influencing the produce of the crops, both as to quantity and quality, the following particulars, and those given on pages 93-113, are inserted by the kind permission of the Editor of the Dublin Journal of Medical Science; they have been derived from Returns of Meteorological Observations taken in Dublin City during the years 1878-98, by J. W. Moore, Esq., M.D., F.R.C.P.L., F.S. MET. SOC.; and published in the Journal during the years 1898-99. The Tables on pages 114-116 also, are founded on Dr. Moore's observations:—

The mean Atmospheric Pressure has been obtained from daily readings of the barometer at 9 A.M. and 9 P.M. corrected and reduced to 32° Fahrenheit at the mean sea level. The Mean Temperature values have been deduced from the maximal and minimal readings of the thermometer in the shade. The Rainfall is that measured daily at 9 A.M. A rainy day is one on which at least .005 inch of rain falls within the twenty-four hours from 9 A.M. to 9 A.M.

The Mean Height of the Barometer during the year 1898 was 29.949 inches. The highest observed reading was 30.589 inches at 9 A.M. on January 23rd. The lowest observed reading was 28.761 inches, at 9 A.M. on November 25th. The extreme range of atmospheric pressure was 1.828 inches compared with 1.914 inches in 1897.

The Mean Temperature of the year, deduced from the arithmetical mean of the maximal and minimal readings of the thermometer in the shade was 51.8°. The highest reading was 77.6° on September 6th; the lowest reading was 28.1° on February 24th. The average mean temperature for the years 1878-97 calculated in the same way was 48.8°. The mean temperature deduced from the daily readings of the dry bulb thermometer at 9 A.M. and 9 P.M. was 50.8°.

Rain fell on 194 days, including snow or sleet on 16 days, and hail on 23 days. The average annual number of rainy days in the years 1878-97 was 196.0. The total rainfall measured 27.065 inches compared with an average of 27.503 inches in the twenty years 1878-97. During the first half of 1898 (January to June, inclusive) the rainfall was 12.115 inches on 98 days; during the second half (July to December, inclusive) 14.933 inches fell on 96 days.

As regards the Direction of the Wind, 730 observations were made during the year, with this result—N., 40; N.E., 45; E., 50; S.E., 57; S., 65; S.W., 124; W., 119; N.W., 97; Calms, 27.

Total produce in 1897 and 1898. Comparing the produce of the Cereal Crops in 1898 with the produce in 1897, we find an increase in wheat of 268,492 cwts., or 37.0 per cent.; in oats of 2,419,525 cwts., or 14.9 per cent.; in barley of 392,473 cwts., or 15.2 per cent.; in bere of 151 cwts., or 8.0 per cent.; in rye* of 16,375 cwts., or 11.6 per cent.; and in beans of 10,271 cwts., or 40.4 per cent.; while the only decrease is one of 666 cwts., or 11.9 per cent. in pease.*

Total produce in 1897 and 1898. In Green Crops, potatoes show an increase of 1,443,847 tons, or 96.4 per cent.; turnips an increase of 1,029,301 tons, or 24.9 per cent.; mangel wurzel and beet-root an increase of 258,517 tons, or 34.4 per cent.; and cabbage an increase of 115,525 tons, or 32.9 per cent.

See Note () on pages 38-39.

Flax shows a decrease of 87,707 stones of 14 lbs., or 7.5 per cent. (following a decrease of 483,213 stones, or 29.3 per cent. in 1897, as compared with 1896, a decrease of 304,173 stones, or 15.6 per cent. in 1896, as compared with 1895, a decrease of 1,490,281 stones, or 43.3 per cent. in 1895 as compared with 1894; and an increase of 980,112 stones, or 39.8 per cent., in 1894, as compared with 1893); hay from clover, sainfoin, and grasses under rotation, an increase of 92,944 tons, or 6.5 per cent.; and hay from permanent pasture or grass not broken up in rotation, an increase of 96,762 tons, or 2.6 per cent.; the entire hay crop showing an increase of 189,706 tons, or 3.7 per cent.

The yield per acre of Cereal Crops in 1898 compared with that of 1897 shows an increase in wheat from 15.4 cwts. to 18.8 cwts.; in oats from 13.8 cwts. to 16.0 cwts.; in barley from 15.2 cwts. to 18.9 cwts.; in bere from 12.7 cwts. to 13.6 cwts.; in rye from 10.8 cwts. to 12.9 cwts.; in beans from 18.5 cwts. to 20.8 cwts.; while there was a decrease in potatoes from 12.7 cwts. to 11.7 cwts. In other crops—potatoes show an increase from 2.2 tons to 4.4 tons; turnips an increase from 13.4 tons to 16.8 tons; mangel wurzel and beet-root from 13.7 tons to 18.0 tons; and cabbage from 8.7 tons to 10.5 tons. Hay from clover, sainfoin, and grasses under rotation shows the same yield in both years; and the yield of hay from permanent pasture or grass not broken up in rotation, an increase from 2.4 tons to 2.5 tons.

The yield per acre of flax was 31.2 stones against 25.6 stones in 1897, 22.6 stones in 1896, and 20.5 stones in 1895, when the yield was lower than in any year since 1871 with the exception of 1887.

The total produce of the principal crops in 1897 and 1898, and the increase or decrease in the latter year, are given in the following Table (VI.); the average produce per statute acre in Table VII.; and in Table VIII. are given the total extent under each of the principal crops, the estimated average yield per statute acre, and the total produce for each year from 1888 to 1898 inclusive.

TABLE VI.—The total produce of the principal Crops in 1897 and 1898 and the increase or decrease in the latter year:—

Estimated average produce per acre in 1897 and 1898.

Produce of the Crops, 1897-98.

Crops.	Produce		Increase in 1898.		Decrease in 1898.	
	1897.	1898	Quantity.	Per-centage.	Quantity.	Per-centage.
Wheat, Cwts. of 112 lbs.,	736,021	994,513	258,492	37.0	—	—
Oats, " "	16,264,733	18,681,288	2,416,555	14.9	—	—
Barley, " "	2,587,137	2,979,410	392,273	15.2	—	—
Bere, " "	1,876	2,027	151	8.0	—	—
Rye, " "	141,693	157,968	16,275	11.6	—	—
Beans, " "	25,424	35,695	10,271	40.4	—	—
Peas, " "	5,603	4,937	—	—	666	11.9
Potatoes, in Tons.	1,498,416	2,942,263	1,443,847	96.4	—	—
Turnips, " "	4,133,585	5,162,866	1,029,281	24.9	—	—
Mangel Wurzel and Beet-Root, " "	751,036	1,009,573	258,537	34.4	—	—
Cabbage, " "	381,308	466,833	115,525	32.9	—	—
Flax, in Stones of 14 lbs.,	1,163,304	1,075,597	—	—	87,707	7.5
Hay, in Tons.	Clover, Sainfoin, and Grasses under Rotation.		1,434,486	1,527,630	92,944	6.5
	Permanent Pasture or Grass not broken up in Rotation.		3,653,231	3,749,993	96,762	2.6

See Note (*) on pages 28-9.

Average
produce of
Crops in
1897 and
1898.

TABLE VII.—The estimated average produce per statute acre of the principal crops in 1897 and 1898, and the increase or decrease in 1898 compared with 1897 :—

Crops.	Produce per Statute Acre		Increase in 1898.	Decrease in 1898.
	1897.	1898		
Wheat, in Cwts. of 112 lbs.,	15.4	18.8	3.4	—
Oats, " " "	13.6	16.0	2.2	—
Barley, " " "	13.2	18.6	5.4	—
Bern, " " "	12.7	13.6	0.9	—
Rye, " " "	10.6	12.9	2.3	—
Beans, " " "	18.5	20.8	2.3	—
Peas, " " "	12.7	11.7	—	1.0
Potatoes, in Tons,	2.2	4.4	2.2	—
Turnips, " " "	13.4	16.8	3.4	—
Mangel Wurzel and Beet Root, " " "	13.7	18.0	4.3	—
Cabbages,	8.7	10.6	1.8	—
Flax, in Stakes of 14 lbs.,	25.6	31.2	5.6	—
Clver, Sainfoin, and Grasses under Ro- tation, " " "	2.3	2.3	—	—
Hay, in Tons, Permanent Pasture or Grass not broken up in Rotation, " " "	2.4	2.3	0.1	—

The further statement contained in Table VIII. gives a general view of the state of agriculture during the year 1898 as compared with the preceding ten years.

Tables showing the total produce of the Crops in 1898, by counties and provinces, will be found at page 40, and by poor law unions at page 46. The average rates by counties and provinces for each year from 1889 to 1898, are given at pages 55 to 59.

TABLE VIII.—The extent under each of the principal Crops—the average Yield per Statute Acre, and the total Produce for all Ireland, in each year from 1888 to 1898, inclusive, with the averages for the ten years, 1888 to 1897.

EXTENT UNDER CROPS IN STATUTE MEASURE												
Years.	Wheat.	Oats.	Barley.	Bern.	Rye.	Potatoes.	Turnips.	Mangel & Beet Root.	Cabbages.	Flax.	Hay.	Total.
1888.	10,082	1,296,358	179,039	390	12,382	551,586	284,227	34,708	42,308	1,4413	3,221,969	1,221,969
1889.	10,114	1,296,000	179,235	371	10,758	731,231	270,903	31,021	42,437	11,602	3,221,969	1,221,969
1890.	10,151	1,295,613	179,485	352	10,472	736,500	266,586	30,637	42,506	10,000	3,221,969	1,221,969
1891.	10,119	1,213,996	177,860	334	11,418	732,232	266,586	31,127	42,619	11,000	3,221,969	1,221,969
1892.	10,095	1,236,141	178,378	338	12,117	739,619	266,141	30,584	42,619	11,000	3,221,969	1,221,969
1893.	10,096	1,244,338	180,776	330	13,405	733,335	263,771	31,208	41,320	11,000	3,221,969	1,221,969
1894.	10,115	1,251,121	181,386	326	13,500	717,000	211,519	30,009	41,500	11,000	3,221,969	1,221,969
1895.	10,115	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1896.	10,115	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1897.	10,115	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1898.	10,115	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
Average, 1888-97.	10,115	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1898.	10,115	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969

ESTIMATED AVERAGE PRODUCE PER STATUTE ACRE												
Years.	Wheat.	Oats.	Barley.	Bern.	Rye.	Potatoes.	Turnips.	Mangel & Beet Root.	Cabbages.	Flax.	Hay.	Total.
1888.	10.0	13.0	13.0	0.3	12.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
1889.	10.1	13.1	13.1	0.3	12.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
1890.	10.2	13.2	13.2	0.3	12.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
1891.	10.3	13.3	13.3	0.3	12.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
1892.	10.4	13.4	13.4	0.3	12.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
1893.	10.5	13.5	13.5	0.3	12.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
1894.	10.6	13.6	13.6	0.3	12.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
1895.	10.7	13.7	13.7	0.3	12.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
1896.	10.8	13.8	13.8	0.3	12.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
1897.	10.9	13.9	13.9	0.3	12.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
1898.	11.0	14.0	14.0	0.3	13.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Average, 1888-97.	10.5	13.5	13.5	0.3	12.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
1898.	11.0	14.0	14.0	0.3	13.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0

TOTAL PRODUCE												
Years.	Wheat.	Oats.	Barley.	Bern.	Rye.	Potatoes.	Turnips.	Mangel & Beet Root.	Cabbages.	Flax.	Hay.	Total.
1888.	1,008,200	1,296,358	179,039	390	12,382	551,586	284,227	34,708	42,308	1,4413	3,221,969	1,221,969
1889.	1,011,400	1,295,613	179,235	371	10,758	731,231	270,903	31,021	42,437	11,602	3,221,969	1,221,969
1890.	1,015,100	1,295,613	179,485	352	10,472	736,500	266,586	30,637	42,506	10,000	3,221,969	1,221,969
1891.	1,011,900	1,213,996	177,860	334	11,418	732,232	266,586	31,127	42,619	11,000	3,221,969	1,221,969
1892.	1,009,500	1,236,141	178,378	338	12,117	739,619	266,141	30,584	42,619	11,000	3,221,969	1,221,969
1893.	1,009,600	1,244,338	180,776	330	13,405	733,335	263,771	31,208	41,320	11,000	3,221,969	1,221,969
1894.	1,011,500	1,251,121	181,386	326	13,500	717,000	211,519	30,009	41,500	11,000	3,221,969	1,221,969
1895.	1,011,500	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1896.	1,011,500	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1897.	1,011,500	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1898.	1,011,500	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
Average, 1888-97.	1,011,500	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969
1898.	1,011,500	1,276,081	171,089	326	11,139	719,854	214,254	29,627	40,735	11,000	3,221,969	1,221,969

* See note (*) on page 38.

LIVE STOCK.

TABLE IX.—The Number and Ages of the Live Stock in Ireland, in 1897 and 1898, and the Increase or Decrease in each description:—

Number and Ages of Live Stock, 1897 and 1898.

Description of Stock.	Number in 1897.	Number in 1898.	Increase in 1898.		Decrease in 1898.	
			In Number.	Per Centage.	In Number.	Per Centage.
HORSES, { Two years old and upwards, .	461,556	458,651	—	—	2,907	0·6
{ One year old and under two, .	85,816	75,367	—	—	8,449	10·1
{ Under one year, .	64,841	56,750	—	—	8,091	12·5
Total No. of Horses, .	610,213	590,768	—	—	19,447	3·2
MULES,	29,270	29,629	359	1·2	—	—
ASSES,	230,253	231,659	1,406	0·6	—	—
CATTLE, { Two years old and upwards, .	2,448,169	2,458,784	10,615	0·4	—	—
{ One year old and under two, .	964,934	982,284	17,350	1·8	—	—
{ Under one year, .	1,661,771	1,645,881	—	—	5,890	0·5
Total No. of Cattle, .	4,464,874	4,486,949	22,075	0·5	—	—
SHEEP, { One year old and upwards, .	2,466,593	2,518,057	51,464	2·1	—	—
{ Under one year, .	1,691,31	1,769,524	78,211	4·6	—	—
Total No. of Sheep, .	4,157,906	4,287,581	129,645	3·1	—	—
PIGS, { One year old and upwards, .	150,803	197,723	—	—	12,942	8·2
{ Under one year, .	1,177,445	1,116,189	—	—	61,256	5·2
Total No. of Pigs, .	1,327,450	1,313,912	—	—	73,538	5·3
GOATS,	290,086	295,437	—	—	2,449	0·9
PONIES,	17,777,248	17,687,470	—	—	89,818	0·5

At the period of the enumeration in 1898, the total number of horses in Ireland was 590,768, being a decrease of 19,447 compared with the number for 1897. There was a decrease of 2,907 in the number "two years old and upwards," of 8,449 in the "one year old and under two," and of 8,091 in those "under one year."

The number of Mules was 29,622, or 352 more than in 1897, and the number of asses 231,659, being an increase of 1,406.

Horses, Mules, and Asses taken together numbered 869,738 in 1897, and 852,049 in 1898, being a decrease of 17,689 or 2·0 per cent. in the latter year; compared with the average number for the ten years 1888-97, they show an increase of 1,009, or 0·1 per cent.

The number of Cattle in 1898 was 4,486,949, showing an increase of 22,075, or 0·5 per cent. as compared with the number enumerated in 1897; there was an increase of 10,615 in the "two years old and upwards"; an increase of 17,350 in the "one year old and under two," and a decrease of 5,890 in the number "under one year." Compared with the average number for the ten years 1888-97, Cattle show an increase of 136,923, or 3·1 per cent.

Number of Live Stock.

Number of
Live Stock.

The number of Sheep in 1898, was 4,287,551, being 129,645, or 3·1 per cent. more than the number for the previous year, and 90,717, or 2·2 per cent. more than the average for the ten years 1888-97; the "one year old and upwards" increased by 51,434, or 2·1 per cent., as compared with the number in 1897, and those "under one year" by 78,211, or 4·6 per cent.

Pigs were returned as 1,253,912 in 1898, showing a decrease of 73,538, or 5·5 per cent., as compared with the previous year. The "one year old and upwards" decreased by 12,282, or 8·2 per cent., and those "under one year" by 61,256, or 5·2 per cent.

Comparing the number of pigs returned in 1898 with the average for the ten years 1888-97, we find a decrease of 90,317, or 6·7 per cent.

The number of goats in 1898 was 296,437, being 3,649 less than in 1897, and 18,388, or 5·8 per cent., under the average for the ten years 1888-97.

Poultry.

Poultry numbered 17,687,430 in 1898, being 89,818 less than in 1897, and 1,754,867, or 11·0 per cent., over the average for the ten years 1888-97. Of the 17,687,430 poultry in 1898, 1,070,904 were turkeys; 2,023,336 geese; 2,949,615 ducks; and 11,643,575 ordinary fowl.

Compared with 1897, turkeys increased by 5,130, but geese decreased by 49,366, ducks by 26,404, and ordinary fowl by 19,178.

Number of
Live Stock,
1888 to
1898.

TABLE X.—The Number of Live Stock in Ireland, in each year from 1888 to 1898 inclusive, with the average numbers for the ten years 1888-97:—

Year.	Horses and Mules.	Asses.	Cattle.	Sheep.	Pigs.	Goats.	Poultry.
1888, . .	395,568	208,153	4,089,195	3,630,669	1,397,895	295,678	14,486,400
1889, . .	404,192	206,234	4,004,174	3,780,187	1,380,670	303,933	14,836,517
1890, . .	414,884	213,018	4,240,315	4,323,385	1,570,366	327,144	15,406,428
1891, . .	421,479	216,248	4,448,611	4,732,613	1,867,712	336,337	15,376,128
1892, . .	426,313	217,600	4,531,145	4,837,777	1,113,472	332,726	15,335,749
1893, . .	443,123	218,720	4,464,657	4,421,455	1,152,417	323,173	16,097,661
1894, . .	452,530	224,513	4,391,839	4,105,180	1,282,324	318,997	16,180,691
1895, . .	460,147	224,408	4,385,032	3,913,449	1,328,464	304,820	16,349,525
1896, . .	459,175	230,721	4,508,135	4,060,711	1,404,586	306,445	17,537,570
1897, . .	439,483	230,263	4,464,874	4,137,906	1,327,420	298,086	17,777,248
Average 1888-97, .	432,561	218,489	4,350,926	4,196,834	1,344,329	314,825	15,932,563
1898, . .	420,390	231,639	4,486,949	4,287,551	1,253,912	296,437	17,687,430

Number of
Live Stock,
1888 to
1898.

TABLE XI.—The proportion per cent. of Horses, Cattle, Sheep, and Pigs in Ireland at each Age, for the years 1888 to 1898, inclusive, and averages for the ten years 1888-97.

Years.	Horses.			CATTLE.			SHEEP.		Pigs.	
	Per-centage at each age.			Per-centage at each age.			Percentage at each age.		Percentage at each age.	
	Two Years old and upwards.	One Year old and under Two.	Under One Year.	Two Years old and upwards.	One Year old and under Two.	Under One Year.	One Year old and upwards.	Under One Year.	One Year old and upwards.	Under One Year.
1888, .	74·4	13·1	12·5	56·2	21·3	22·5	59·6	40·4	12·2	87·8
1889, .	74·4	13·4	12·2	55·5	21·2	23·3	59·5	40·5	12·2	87·8
1890, .	73·3	13·7	13·0	54·7	21·2	24·1	59·7	41·3	12·1	87·9
1891, .	72·2	14·6	13·3	54·1	22·0	23·9	59·0	41·0	11·7	88·3
1892, .	71·1	15·3	13·4	55·1	22·4	22·5	59·7	40·3	12·0	88·0
1893, .	71·2	15·9	12·9	56·9	21·7	21·4	60·6	39·4	12·1	87·9
1894, .	71·7	15·9	12·4	57·3	20·8	21·9	60·7	39·3	11·8	88·2
1895, .	73·0	15·1	11·9	55·7	20·9	23·4	60·0	40·0	11·7	88·3
1896, .	73·8	14·5	11·7	55·1	21·7	23·2	59·8	40·4	11·7	88·3
1897, .	73·7	13·7	10·6	54·6	21·6	23·6	59·3	40·7	11·3	88·7
Average 1888-97, .	73·1	14·5	12·4	55·5	21·3	23·0	59·7	40·5	11·9	88·1
1898, .	77·6	12·8	9·6	54·6	21·9	23·5	59·7	41·3	11·0	89·0

MILCH COWS.

Milch Cows.

The following statement (Table XII.) shows the number of Milch Cows in Ireland in each year from 1854—the first year in which Milch Cows were separately enumerated—to 1898. The average number for the first five years of the period was 1,579,851, and for the last five years 1,435,468, being a decline of 144,383 or 9·1 per cent. The highest number in any one year was 1,690,389 in 1859, and the lowest 1,348,886 in 1864. The number for last year was 1,431,192, being 6,304 under the average for the preceding five years, and 3,733 under the number for 1897.

Years.	No. of Milch Cows.	Years.	No. of Milch Cows.	Years.	No. of Milch Cows.	Years.	No. of Milch Cows.
1854.	1,517,472	1866.	1,483,616	1878.	1,484,315	1890.	1,400,527
1855.	1,561,296	1867.	1,521,053	1879.	1,464,818	1891.	1,445,268
1856.	1,579,629	1868.	1,476,339	1880.	1,398,047	1892.	1,451,059
1857.	1,606,350	1869.	1,506,038	1881.	1,392,012	1893.	1,441,329
1858.	1,635,408	1870.	1,539,024	1882.	1,399,005	1894.	1,447,441
1859.	1,690,389	1871.	1,545,082	1883.	1,402,324	1895.	1,433,988
1860.	1,626,483	1872.	1,551,784	1884.	1,356,585	1896.	1,429,795
1861.	1,545,168	1873.	1,528,136	1885.	1,417,423	1897.	1,434,920
1862.	1,486,836	1874.	1,491,375	1886.	1,418,444	1898.	1,431,192
1863.	1,396,924	1875.	1,530,346	1887.	1,394,135		
1864.	1,348,886	1876.	1,532,974	1888.	1,384,771		
1865.	1,367,448	1877.	1,523,811	1889.	1,363,781		

BOARS KEPT FOR BREEDING PURPOSES.

In connexion with the Agricultural Statistics for 1898, a return of the number of Boars kept for breeding purposes in his District was obtained from each Enumerator, and the information thus arrived at will be found set forth by Provinces and Counties, in Table 17, pages 74-75. The total number of Boars returned is 1,873, of which 152 were imported, and 1,721 bred in Ireland. The number of each of the principal descriptions is shown in the Table, from which it will be observed that more than one-half (1,019) of the total were White Figs of the Large, Middle, or Small Yorkshire varieties.

DAIRY INDUSTRIES.

As the increase during recent years in the number of Dairy Factories appeared to render it desirable that some particulars should be obtained regarding what is now an important Agricultural industry, information on several points connected with the subject was collected through the medium of the Enumerators in each of the last eight years. Statistics were also had respecting the number of Milk Separators used in private establishments.

The Table on the next page shows, *inter alia*, that the number of Factories from which statistics were obtained in 1898 was 387, being an increase of 63 as compared with the number returned in 1897, and that the number of bands permanently employed amounted to 3,323, or 631 more than the number for 1897. Of the 387 factories, 109 were owned by individual proprietors, 113 were the property of Joint Stock Companies, and 165 belonged to Co-operative Farmers. In the 387 Factories there were 830 milk separators, of which 718, or 86·5 per cent., were worked by steam-power. Nearly three-fourths of the total number of Factories were in Munster, the number for that province being 278; in Leinster there were 41, in Ulster 44, and in Connaught 24. The quantity of Butter returned as produced during the year ended 30th September, 1898, was 360,798 cwt. (against 294,105 cwt. in the preceding year), and of Cheese 1,280 cwt., and the number of lbs. of Condensed Milk 30,832,342.

The Return is not complete, as, in a few instances, the required information could not be obtained.

DISEASES OF ANIMALS.

The following information has been derived from Returns compiled in pursuance of the provisions of the 50th section of the Diseases of Animals Act, 1894, for the year ended the 31st December, 1898. Diseases of Animals.

No outbreaks of Pleuro-Pneumonia have occurred during the last six years. The numbers for the four previous years were 86 for 1892, 133 for 1891, 95 for 1890, and 108 for 1889.

Ireland continues to be free from Foot-and-Mouth Disease. No case has occurred since the year 1884.

As regards Swine Fever, during the year 1898, 2,698 suspected outbreaks were reported. The existence of disease was confirmed in 319 of these cases by the Veterinary Officers of the Privy Council Department, who examined the internal organs of the dead or slaughtered swine. There were 3,800 outbreaks in the preceding year. In the year 1896 the number was 5,354; in 1895 it was 3,045, in 1894 it was 7,619, and in 1893, 506.

Six outbreaks of Glanders were reported during the year.

There were two outbreaks of Anthrax during the year; in neither of the two preceding years were there any such. There were 4 in 1895, 5 in 1894, 22 in 1893, 6 in 1892, 29 in 1891, 17 in 1890, and 21 in 1889.

The Returns show that the number of cases of Rabies reported in 1898 was only 132, as compared with 497 in 1897, 687 in 1896, 771 in 1895, 779 in 1894, 424 in 1893, 446 in 1892, 470 in 1891, and 353 in 1890.

EXPORTS AND IMPORTS OF LIVE STOCK.

With the view of giving a more accurate idea of the number of live stock produced in Ireland, the statement (TABLE XIV.) on page 22 has been compiled from Statistical Returns prepared under the "Diseases of Animals Act, 1894," by the Veterinary Department of the Privy Council. Exports of Live Stock.

Viewing the number of animals exported to Great Britain in relation to those enumerated, it is found that the cattle exported bear a relation of 17.9 per cent. to those enumerated in 1898, as compared with 16.7 per cent. in 1897; sheep 19.4 per cent. as compared with 19.3 per cent. in 1897; and pigs 47.0 per cent. as compared with 52.4 per cent. in 1897.

From the same Returns it appears that the number of horses exported to Great Britain in 1898 amounted to 38,804, equal to 6.6 per cent. of those enumerated.

It also appears that during the same period there were imported into Ireland, 5,796 horses, 421 cattle (including 37 calves), 24,610 sheep, and 126 pigs. Imports of Live Stock.

[TABLE XIV.]

Exports of
Live Stock.

TABLE XIV.—Number of Cattle, Sheep, and Swine, exported from Ireland to Great Britain during each of the twenty-four years, 1875-98 :—

Years.	Cattle				Sheep.			Swine.			Years.		
	Oxen, Bulls, and Cows				Other.	Total.	Sheep.	Lambs.	Total.	Fat Swine.		Sow Swine.	Total.
	Fat Cattle.	Stock Cattle for Slaughter or Breeding purposes.	Other Cattle.	Total.									
1875.	391,661	263,271	13,757	668,689	20,764	689,453	741,097	376,872	1,117,969	365,179	74,456	439,635	1875.
1876.	376,114	256,513	15,728	648,355	12,947	661,302	674,972	315,957	990,929	435,046	77,272	512,318	1876.
1877.	366,868	261,263	7,764	635,895	20,789	656,684	651,338	156,644	807,982	590,512	75,580	666,092	1877.
1878.	366,244	248,739	4,854	619,837	41,544	661,381	646,238	156,301	802,539	603,537	85,590	689,127	1878.
1879.	347,637	230,264	6,545	584,446	55,364	639,810	606,091	166,736	772,827	573,873	88,954	662,827	1879.
1880.	363,665	215,262	5,418	584,345	68,471	652,816	595,946	211,637	807,583	588,692	38,337	627,029	1880.
1881.	375,126	260,996	3,501	639,623	30,510	670,133	605,790	243,094	848,884	546,132	58,666	604,800	1881.
1882.	361,777	267,756	2,866	632,399	16,613	649,012	585,608	174,638	760,246	603,443	43,672	647,115	1882.
1883.	320,666	229,319	1,613	551,598	16,327	567,925	525,336	219,310	744,646	489,753	37,156	526,909	1883.
1884.	326,836	267,262	2,260	596,358	71,548	667,906	536,416	277,513	813,929	431,221	29,441	460,662	1884.
1885.	315,245	242,666	1,964	559,875	33,260	593,135	458,419	156,690	615,109	478,616	27,621	506,237	1885.
1886.	365,166	268,217	1,747	635,130	12,668	647,798	616,343	243,230	859,573	525,569	26,776	552,345	1886.
1887.	361,116	266,619	2,261	629,996	12,714	642,710	531,644	231,254	762,898	606,135	42,761	648,896	1887.
1888.	367,597	266,846	2,541	636,984	67,606	704,590	600,666	236,766	837,432	605,799	48,779	654,578	1888.
1889.	346,243	273,662	1,410	621,315	47,267	668,582	575,115	225,210	800,325	618,597	63,193	681,790	1889.
1890.	316,239	269,756	1,122	587,117	13,449	600,566	536,230	216,740	752,970	596,481	58,749	655,230	1890.
1891.	368,566	256,666	3,965	629,197	33,666	662,863	595,666	235,666	831,332	615,666	45,666	661,332	1891.
1892.	356,116	261,116	2,261	619,493	16,613	636,106	512,312	165,345	677,657	427,657	42,761	470,418	1892.
1893.	316,246	216,246	1,613	534,105	16,327	550,432	462,461	1,187,500	1,649,961	71,261	45,666	117,927	1893.
1894.	326,761	226,761	2,261	555,783	16,327	572,110	476,471	165,666	642,137	615,666	45,666	661,332	1894.
1895.	362,116	216,116	1,613	579,845	16,327	596,172	512,312	165,345	677,657	427,657	42,761	470,418	1895.
1896.	374,413	268,666	2,537	645,616	16,327	661,943	536,766	231,766	768,532	605,799	48,779	654,578	1896.
1897.	366,116	216,116	1,613	583,845	16,327	599,172	476,471	165,666	642,137	615,666	45,666	661,332	1897.
1898.	376,200	266,200	1,181	643,581	16,327	659,908	536,766	231,766	768,532	605,799	48,779	654,578	1898.

HONEY PRODUCED IN 1897.

The inquiries made in the preceding twelve years relative to the extent to which bee-keeping is followed in Ireland, and the degree of success attained in this special branch of rural economy, were repeated last year with reference to the season of 1897.

According to the Returns received there would appear to have been an increase of 39·0 per cent. in the quantity of honey produced in 1897, as compared with the preceding year, the returns for which showed an increase of 15·4 per cent. as compared with the quantity in 1895.

The quantity of honey produced, according to the Returns, was 382,930 lbs.; of this, 125,219 lbs. were produced in the province of Leinster; 117,528 lbs. in Munster; 87,339 lbs. in Ulster; and 51,944 lbs. in Connaught. Of the 382,930 lbs., 227,820 lbs. were produced "in Hives having Movable Combs," and 155,110 lbs. "in other Hives." It was stated that 178,713 lbs. was "Run Honey," and 203,317 lbs. "Section Honey."

The number of stocks brought through the winter of 1897-98 amounted to 21,796; of which 19,511 were in hives having movable combs, and 11,285 in other hives.

According to the returns collected there were 4,255 lbs. of wax manufactured in 1897, of which 1,879 lbs. were from hives having movable combs, and 2,376 lbs. from other hives.

The Returns received in 1897 gave the number of swarms at work during the season of 1896 as 12,595; the quantity of honey as 274,809 lbs.; the number of stocks brought through the winter of 1896-97 as 16,503; and the quantity of wax manufactured in 1896 as 3,832 lbs.

The following Table shows the quantity of Honey returned as produced in Ireland during each of the eleven years, 1887-97. It will be observed, that the quantity produced in 1897, was greater than that for any of the seven years, 1890-6, and much above the average for the ten years 1887-96.

Honey Produced, 1887 to 1897.

TABLE XV.—Showing for each of the Eleven Years 1887-97 the Quantity of Honey Produced in Ireland, distinguishing the quantity Produced in Hives having Movable Combs from that Produced in other Hives, and RUN HONEY from SECTION HONEY; with the average annual quantity for the Ten Years 1887-96:—

YEARS.	HONEY PRODUCED, IN LBS.						GENERAL TOTAL.
	In Hives having Movable Combs.			In other Hives.			
	Run.	Section.	Total.	Run.	Section.	Total.	
1887, . . .	77,897	134,337	212,234	188,951	58,181	247,132	459,366
1888, . . .	53,788	92,653	146,441	137,301	43,350	179,651	326,092
1889, . . .	74,942	143,566	218,508	103,104	53,978	156,082	374,590
1890, . . .	47,952	86,136	134,088	116,999	42,429	159,428	293,516
1891, . . .	43,687	91,541	135,228	88,909	30,004	118,913	254,141
1892, . . .	34,707	68,639	103,346	66,733	21,888	88,621	191,967
1893, . . .	40,900	91,413	132,313	81,685	34,865	116,550	248,863
1894, . . .	42,181	87,644	129,825	70,150	34,863	105,013	234,838
1895, . . .	43,715	95,041	138,756	71,314	28,101	99,415	238,171
1896, . . .	45,364	119,195	164,559	81,329	20,921	102,250	266,809
Average 1887-96, . . .	50,643	101,119	151,762	105,407	37,468	142,875	294,637
1897, . . .	62,585	165,335	227,920	116,128	58,082	174,210	402,130

SCUTCHING MILLS.

The number of Mills for scutching Flax in Ireland in 1898 was 892, being a decrease of 26 compared with the number for 1897, and a decrease of 170 since the year 1889. Of the 892 Mills, 879 were in Ulster, 6 in Connaught, 5 in Leinster, and 2 in Munster. There were 388 Mills with from 1 to 4 stocks; 293 having 5 or 6; 185 with from 7 to 12; 21 having from 13 to 18, and 5 having above 18 stocks; 737 were worked by water power; 99 by steam; 54 by water and steam; and two by wind power. The total number of Stocks in Ireland in 1898 amounted to 5,151, and of this number 5,040 were in Mills situated in Ulster.

Scutching Mills, 1889 to 1898.

The following is the number of Scutching Mills, in each year, from 1889 to 1898, inclusive, by Provinces:—

Scutching Mills, 1889 to 1898.

Provinces.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Leinster, . . .	7	7	7	4	6	5	7	7	5	5
Munster, . . .	4	5	5	6	4	4	5	3	2	2
Ulster, . . .	1,048	1,043	992	979	954	945	933	917	907	879
Connaught, . . .	3	2	2	4	6	5	6	6	4	6
Ireland, . . .	1,062	1,057	1,006	993	970	959	951	933	918	892

Scutching
Mills, 1898.

TABLE XVI.—NUMBER OF SCUTCHING MILLS IN 1898, BY COUNTIES AND PROVINCES, classified according to the number of Stocks in each Mill, and the Power used in working them; with the Total Number of Stocks in each County:—

PROVINCES AND COUNTIES IN WHICH THEY WERE SCUTCHING MILLS.	POWER EMPLOYED.					Total No. of Mills.	CLASSIFICATION OF MILLS.					Total No. of Stocks.
	Water.	Steam.	Water and Steam.	Horse.	Wind.		Having 1, 2, 3 or 4 Stocks.	Having 5 or 6 Stocks.	Having above 6 but not exceeding 12 Stocks.	Having above 12 but not exceeding 16 Stocks.	Having above 16 Stocks.	
LEINSTER:												
Louth & Drogheda, Co. of Town.	2	1	.	.	.	3	.	.	3	.	.	30
Meath, . . .	2	.	.	.	.	2	.	1	1	.	.	14
Total, . . .	4	1	.	.	.	5	.	1	4	.	.	44
MUNSTER:												
Cork, . . .	2	.	.	.	.	2	.	2	.	.	.	11
ULSTER:												
Antrim, . . .	122	8	5	.	.	135	39	54	28	.	.	719
Armagh, . . .	51	13	5	.	.	69	8	29	25	4	3	560
Cavan, . . .	26	7	.	.	.	33	4	17	11	.	1	243
Donegal, . . .	115	1	4	.	.	122	84	17	11	.	.	512
Down, . . .	83	33	14	.	.	130	16	52	53	9	.	961
Fermanagh, . .	18	1	1	.	.	20	12	4	4	.	.	163
Londonderry, .	157	9	7	.	.	163	91	48	12	2	.	729
Monaghan, . .	47	11	6	.	.	64	18	24	17	4	1	444
Tyrone, . . .	122	14	10	.	2	143	85	45	22	1	.	769
Total, . . .	724	97	54	.	2	829	387	290	177	20	5	5,040
CONNAUGHT:												
Leitrim, . . .	2	.	.	.	.	2	.	.	2	.	.	16
Mayo, . . .	1	1	.	.	.	2	1	.	1	.	.	12
Roscommon, . .	2	.	.	.	.	2	.	.	1	1	.	28
Total, . . .	5	1	.	.	.	6	1	.	4	1	.	56
TOTAL OF IRELAND,	737	99	54	.	2	892	388	293	185	21	5	5,151

CORN MILLS.

Corn Mills,
1898.

As in the seven preceding years, returns were obtained in 1898 showing the number of Corn Mills in Ireland, with details as to the power used, the kind of corn chiefly ground, and the average quantity ground per week when the mills are at work. The results are given, by provinces and counties, in the following table, from which it appears that the total number of mills returned is 1,412 (a decrease of 22 as compared with the

number for 1897) of which 1,234 were worked by water, 93 by steam, 18 by wind, and Corn Mills, 67 by water and steam; and that wheat was the chief kind of corn ground in 195 mills, oats in 965, and Indian corn in 237. In 201 of the 1,412 mills the average quantity ground per week, when the mills are at work, exceeds 500 cwt.

TABLE XVII.—Number of CORN MILLS in 1898, by COUNTIES and PROVINCES, classified according to the Power used, the kind of Corn chiefly ground, and the average Quantity (in cwt.) ground per week when the Mills are at work.

COUNTIES AND PROVINCES.	Total No. of Mills.	DESCRIPTION OF POWER USED.				KIND OF CORN CHIEFLY GROUND.				AVERAGE QUANTITY GROUND PER WEEK WHEN AT WORK.							
		Water.	Steam.	Wind.	Water and Steam.	Wheat.	Oats.	Indian Corn.	All other.	Under 50 cwt.	50 and under 100 cwt.	100 and under 200 cwt.	200 and under 300 cwt.	300 cwt. and upwards.			
Number of Mills.				Number of Mills.				Number of Mills.									
LEINSTER:																	
Carlow,	20	10	.	.	1	5	14	0	.	.	.	4	0	0	4		
Dublin,	20	25	0	.	3	0	11	0	.	1	1	4	0	1	16		
Kildare,	20	20	.	.	4	0	18	0	.	1	1	2	12	0	4		
Kilkenny,	65	47	0	.	4	7	33	32	2	0	4	12	39	11	0		
King's,	21	20	1	.	1	0	20	1	.	3	0	0	0	0	0		
Longford,	27	27	.	.	.	.	26	1	.	0	0	7	18	1	1
Loyds and Drogheda, County of Town,	28	16	7	.	2	0	12	7	.	0	1	7	0	0	0		
Monaghan,	44	42	.	.	2	0	20	7	.	4	0	10	12	0	0		
Queen's,	27	26	.	.	3	0	20	0	.	1	0	1	7	7	7		
Westmeath,	36	36	.	.	.	.	30	0	0	0	0	11	20	0	0
Wexford,	109	83	2	14	.	52	30	0	0	0	24	20	0	0	0		
Wicklow,	17	16	.	.	1	0	10	1	.	1	0	0	1	4	2		
Total,	452	320	21	14	23	57	303	74	11	24	10	115	126	74	60		
MUNSTER:																	
Clare,	31	0	0	.	2	0	0	0	.	0	1	.	.	0	0		
Cork,	80	40	30	.	11	55	12	0	1	7	0	0	10	17	20		
Down,	10	0	7	.	2	0	0	0	.	1	0	0	0	1	0		
Limerick,	30	17	0	.	.	13	0	0	.	0	.	0	0	1	0		
Tipperary,	44	30	0	.	0	0	20	0	.	1	.	11	13	20	0		
Waterford,	16	14	.	.	0	0	0	0	1	.	1	0	0	0	0		
Total,	193	101	37	.	15	68	32	0	2	10	12	22	20	38	20		
ULSTER:																	
Coleraine,	20	25	0	.	0	0	20	0	.	0	20	0	0	0	0		
County of Down,	40	40	0	.	.	0	30	0	.	0	14	0	0	0	0		
Armagh,	50	0	.	.	.	1	0	.	.	0	0	20	0	1	1		
County of Antrim,	06	07	1	.	0	0	01	25	.	1	0	12	10	0	0		
County of Donegal,	70	37	0	4	0	14	00	0	.	0	0	10	00	10	7		
Fermanagh,	00	00	.	.	.	00	1	.	.	0	0	14	0	0	0		
Fenagh,	00	00	0	.	2	0	00	0	.	1	0	7	00	00	0		
Longsherry,	00	00	1	.	0	0	00	0	.	0	11	00	00	0	0		
Monaghan,	00	00	0	.	0	1	00	0	1	10	14	00	00	0	7		
Tyrone,	00	00	0	.	0	1	00	0	1	10	14	00	00	0	7		
Total,	616	406	30	4	23	30	320	01	2	52	33	100	104	60	32		
CONNAUGHT:																	
Galway,	21	07	.	.	.	14	00	0	1	0	0	17	10	0	1		
Louth,	21	21	.	.	.	00	1	.	.	1	0	0	0	1	0		
Mayo,	27	00	.	.	1	0	00	0	.	0	2	10	0	11	0		
Donegal,	20	20	.	.	1	0	00	0	.	0	0	0	0	0	0		
Sligo,	27	16	1	.	.	0	0	0	.	0	1	1	0	0	0		
Total,	100	107	1	.	2	14	00	0	1	22	14	45	20	22	10		
TOTAL OF IRELAND,	1,412	1,234	60	28	57	180	965	377	15	121	108	375	320	207	90		

SILOS AND ENSILAGE.

Silos and
Ensilage.

Following the course adopted in the eleven previous years relative to Ensilage, I communicated with those Landed Proprietors and Landholders, throughout the country, reported to me as having Silos or otherwise making Ensilage, requesting them to favour me with certain details regarding the methods followed and the results obtained in the year 1898. I received replies to 129 out of 165 circulars issued by me, and I beg to express my obligations to my correspondents for the valuable and interesting information afforded. It will be found set forth in the Appendix, pp. 76 to 91. Many of the replies stated that no ensilage was made during the season of 1898, owing to the weather being so favourable for the saving of hay.

The following Table (XVIII.) shows, by Counties and Provinces, for the years 1897 and 1898, the number of Silos or Stacks mentioned in the communications received from the persons who forwarded replies to the circular above referred to:—

Counties.	Number in 1897.	Number in 1898.	Counties.	Number in 1897.	Number in 1898.
Antrim,	10	2	Mayo,	3	8
Armagh,	—	—	Meath,	30	17
Carlow,	3	—	Monaghan,	3	—
Cavan,	2	4	Queen's,	3	1
Clare,	4	3	Roscommon,	10	9
Cork,	7	4	Sligo,	3	—
Donegal,	3	—	Tipperary,	11	7
Down,	1	2	Tyrone,	1	2
Dublin,	3	3	Waterford,	—	1
Fermanagh,	2	2	Westmeath,	14	10
Galway,	8	4	Wexford,	1	2
Kerry,	1	1	Wicklow,	5	4
Kildare,	1	—			
Kilkenny,	5	4	PROVINCES.		
King's,	9	10	Leinster,	85	54
Lancaster,	3	7	Munster,	26	17
Limerick,	3	1	Ulster,	27	15
Londonderry,	5	3	Connaught,	27	28
Longford,	2	2			
Louth,	—	1	TOTAL OF IRELAND,	165	114

FORESTRY OPERATIONS.

Forestry
Operations.

The inquiries into Forestry Operations instituted in 1890, and continued in the seven following years, were repeated in 1898. The details are set forth in the GENERAL ABSTRACT OF FORESTRY OPERATIONS IN IRELAND during the year ended 30th June, 1898. The subjects dealt with in the Abstract are—I. Planting—The area planted during the year ended 30th June, 1898, the total number of trees planted in that period, and the number of each description; II. Felling—The area cleared and the number of trees of each description felled; III. Ages of trees felled; IV. Disposal of timber. The inquiry did not extend to the planting or felling of isolated trees.

It appears that during the period 1851-98 there were some slight fluctuations in the acreage, and that comparing 1898 with 1851 there has been an increase of about 0.9 per cent., the extent under woods and plantations in 1851 being 304,906 statute acres, and in last year 307,661 acres.

During the year ended 30th June, 1898, 1,431 acres were planted with trees, being 297 acres more than the extent planted in the preceding year.

In connection with this subject it may be here mentioned that from the passing of the Act 29 and 30 Vic., cap. 40, to the 31st March, 1898, 131 loans for £29,950 were sanctioned for planting for shelter, and of this number one loan (for £200) was sanctioned in the last year of that period.

The number of trees felled both for clearance and for thinning plantations amounted to 671,962.* The area returned as cleared is 1,008 acres.†

Of the 671,962* trees felled, 270,133 were used for "propping," which appears to have been the chief purpose to which the timber of almost all descriptions was applied. The numbers applied to the principal specified uses comprise also:—6,479 trees for sleepers, 25,187 for piling, 13,780 for fuel, 23,701 for furniture and building purposes, 5,291 for carts, wagons, &c., and 750 for dog sties.

* This number is exclusive of 309,000 trees in a plantation destroyed by fire.

† Including 150 acres of the plantation referred to in note (*).

WAGES OF AGRICULTURAL LABOURERS IN 1898.

Enquiries were made as to the Wages paid per day to Agricultural Labourers in 1898, and the information received from the District Inspectors of the Royal Irish Constabulary with reference to their respective districts is shown in the following Table (XIX.) and notes appended thereto.

I.—PROVINCE OF LEINSTER.

COUNTIES AND CONSIDERABLE DISTRICTS.	SUMMER								WINTER							
	Men		Boys		Women		Girls		Men		Boys		Women		Girls	
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To
CARLOW COUNTY.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Imperialstown (G.)	14	19	00	11	10	12	10	10	11	14	08	09	08	010	09	09
Carlow (G.)	19	25	14	13	12	15	011	10	11	15	010	10	011	10	010	010
DUBLIN COUNTY.																
Ballinacorney	20	20	11	10	10	10	011	14	10	21	08	011	010	10	08	010
Clontarf	20	20	10	10	10	10	10	10	10	20	010	10	10	10	00	10
Donnybrook	20	20	10	10	10	10	010	11	11	20	11	10	11	14	08	010
Lower (G.)	22	212	12	19	13	10	10	10	112	24	010	13	010	11	00	10
KILDARE COUNTY.																
Abby	20	20	10	20	20	20	10	20	10	20	10	10	10	20	10	10
Kildare	20	20	10	10	10	10	10	10	10	20	10	10	10	10	00	010
Naas (G.)	20	20	10	20	20	20	20	20	20	20	10	20	10	20	10	10
Waterbury	20	20	10	10	10	10	00	10	10	10	010	10	010	10	00	00
KILKENNY COUNTY.																
Callan	10	20	10	10	10	20	010	10	10	10	010	10	010	10	010	10
Callinacorney (G.)	10	10	010	10	00	00	00	00	010	10	00	00	00	00	00	00
Johnstown (G.)	20	20	10	10	10	20	10	20	10	10	00	10	10	10	00	10
Kilkenney	11	20	10	10	10	10	010	10	14	10	010	11	010	10	00	010
Wicklow (G.)	10	20	10	14	12	10	10	10	12	10	00	00	00	010	00	00
Thamesbury (G.)	10	10	10	14	10	10	010	10	010	10	00	010	00	10	00	010
KING'S COUNTY.																
Buncliff (G.)	20	20	10	10	10	10	010	10	10	10	010	10	010	10	00	00
Glendary	20	20	10	10	10	20	010	20	10	10	00	10	010	10	00	10
Glendary	20	20	10	10	10	10	10	10	10	10	00	010	00	00	00	00
Glendary (G.)	20	20	10	10	10	20	10	10	10	10	010	10	010	10	00	010
Glendary (G.)	10	20	10	10	10	10	010	10	10	10	010	10	010	10	00	010
LONGFORD COUNTY.																
Ballinacorney (G.)	10	20	10	10	10	10	-	-	00	10	00	00	-	-	-	-
Glendary (G.)	10	20	00	10	010	10	00	10	00	10	00	10	00	10	00	10
Longford	10	20	00	10	010	10	00	010	10	10	010	00	00	00	00	00
LOUTH COUNTY.																
Ards	10	10	010	10	10	10	010	010	10	10	010	010	010	010	00	00
Coleraine	20	20	00	10	10	10	00	00	00	10	10	10	00	10	00	00
Downpatrick (G.)	20	20	10	10	10	10	010	10	10	20	10	10	010	10	00	010
Downpatrick	10	20	10	10	10	20	00	10	10	10	010	10	10	10	00	010

(a) Most of the women and girls are employed by the year, these rates include one and sixpence two meals a day.

(b) No meals are provided at these rates. Women and girls are not much employed in the district.

(c) Very few women or girls employed seasonally based, work during winter months.

(d) Labour has become extraordinarily scarce and expensive, and good work people can hardly be got at any price.

(e) These people receive their diet in addition to the wages shown, but are not necessarily employed. Some labourers who are constantly employed receive 1s. per week, without diet.

(f) The average daily wages shown do not include diet, being a custom in this district, the higher wages being paid during harvest time.

(g) With diet.

(h) These rates include diet. Without diet men get 6d. in summer and 4s. in winter, boys 4s. in summer and 4s. in winter, and women and girls 4s. in summer and 4s. in winter.

(i) All rates without food. There is very little employment for boys, women or girls in winter.

(j) Very little labour for women in this district, particularly in the winter season.

(k) The wages shown include food for the workers. No girls employed in this district by the day.

(l) The labourers are usually supported for the day by their employers, in addition to these rates.

(m) Without food or lodging.

D 2

I.—PROVINCE OF LEINSTER—continued.

[illegible]

II. PROVINCE OF MUNSTER.

CLARE COUNTY.																			
Bellington (A).	14	25	10	16	10	20	00	10	10	20	010	15	10	16	00				
Corvallis.	14	20	10	13	13	10	010	10	13	10	00	010	010	10	00				
Dunk.	14	20	08	10	10	10	010	10	10	10	00	10	00	10	00				
Erskine (C).	20	20	10	10	10	10	00	10	10	20	010	10	00	10	00				
Kilbuck (A).	10	20	10	10	10	10	00	10	10	10	010	10	00	10	00				
Kilbuck.	20	20	10	10	10	10	00	010	10	10	010	10	010	10	00				
Kilbuck.	10	10	10	10	10	10	00	10	10	10	10	10	10	10	00				
Stonewall (A).	10	10	10	10	10	10	010	10	10	10	00	010	00	10	00				
Tulla.	10	20	10	10	00	10	00	00	10	10	00	00	00	00	00				

10. All exclusive of men. There are few agricultural laborers in the district, except herds who are employed all the year round at from 8, to 10 pias apiece.

(a) Women are not employed as agricultural laborers in winter.

(b) Very few women or girls employed in the district.

(c) These men are exclusive of herds. In harvest time wages would be from 60 to a 2.5 day higher.

(d) Women and girls are not much employed in winter.

(e) Very few women or girls are employed in the district during the winter at agricultural work.

(f) Very few of only women or girls employed by the day in the district in winter season.

(g) No women or girls employed in winter laborers.

(h) Very few women or girls employed, especially in winter.

(i) During the harvest season a good deal more men to be paid all district. These payments are without dist.

(j) District work for men of the laborers. Women are paid in one day in harvest when lending the oxen and bullock.

(k) Without dist.

(l) Women or girls are very generally employed, in portions of district only employed during the cold and rainy.

(m) There are the usual men without dist. In a day in harvest time and other very busy seasons that 30, or 30, 60 is paid.

(n) Women for men and high wages in winter.

(o) In general no distinction is made between men and girls without dist.

(p) Usually say are employed in laborers in this district, and very little to agriculture.

(q) Very few women employed in a seasonal labor, especially during the winter months.

(r) Women and girls are rarely employed in winter.

II.—PROVINCE OF MUNSTER—continued.

COUNTIES AND CONSIDERABLE DISTRICTS.	SUMMER.								WINTER.							
	Men.		Boys.		Women.		Girls.		Men.		Boys.		Women.		Girls.	
	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.
CORK COUNTY, (R.R.)	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bahinclogh, . . .	1 6	2 0	4 8	1 0	3 9	1 3	0 9	1 0	0 30	1 6	0 5	0 4	0 3	0 12	0 0	0 9
Chapelton, . . .	1 6	2 6	1 2	1 8	1 0	1 0	0 9	1 5	1 0	2 0	0 10	1 2	0 10	1 6	0 5	1 0
Cork, North (S.), . .	1 10	2 0	1 0	1 3	1 0	1 2	0 5	1 0	0 7	1 40	0 11	1 0	0 10	1 0	0 7	0 10
Cork, South, . . .	2 3	2 9	1 5	1 7	1 2	1 2	0 9	1 0	0 9	1 11	1 0	1 2	1 0	1 2	0 8	0 10
Ferries, . . .	1 0	2 0	1 0	1 3	1 0	1 3	0 5	0 8	1 0	1 5	0 5	0 6	0 8	0 10	0 4	0 0
Kanturk (S.), . . .	1 8	2 6	1 0	1 2	1 0	1 2	0 5	1 0	1 0	1 4	0 0	1 0	-	-	-	-
Kinsale, . . .	1 12	2 0	0 10	1 2	1 0	1 0	0 10	1 2	1 2	1 5	0 7	0 10	0 0	0 11	0 7	0 30
Malin, . . .	2 0	2 5	1 0	2 0	1 6	2 0	0 3	1 0	1 0	1 6	0 9	1 2	1 0	1 4	0 5	0 30
Midleton, . . .	1 0	2 1	1 1	1 2	1 4	1 0	0 10	1 1	1 5	1 11	0 10	1 0	0 10	1 1	0 5	0 30
Trillickdown, . . .	2 0	2 5	1 0	1 4	1 0	1 0	1 0	1 5	1 0	1 2	0 6	0 10	0 5	0 10	0 5	0 5
Newmarket, . . .	1 6	2 6	0 6	1 2	1 0	1 4	0 6	0 10	0 10	1 2	0 4	0 7	0 8	0 9	0 3	0 6
Quinnstown, . . .	1 11	2 0	1 1	1 4	1 5	1 7	0 8	1 0	1 3	1 8	0 10	1 0	0 10	1 0	0 8	0 5
Youghal (S.), . . .	1 0	2 6	1 0	1 3	0 11	1 4	0 10	1 1	0 9	1 0	0 6	1 2	0 9	1 2	0 7	0 10
CORK COUNTY, (W.I.)																
Bandon, . . .	3 0	3 8	1 3	1 8	1 5	2 0	1 0	1 5	1 0	1 8	0 8	1 0	1 0	1 2	0 8	1 0
Bantry (S.), . . .	1 2	1 5	0 10	1 2	0 11	1 5	0 5	0 8	0 10	1 2	0 5	0 10	0 8	0 10	0 4	0 6
Carrigrohane, . . .	0 8	0 9	1 0	1 0	1 6	2 3	1 0	1 2	1 0	2 0	0 9	1 0	1 0	2 0	0 2	1 0
Cloyahilly (S.), . . .	1 6	2 1	1 0	1 2	1 0	1 4	0 8	1 0	1 0	1 5	0 9	0 11	0 10	1 0	0 7	0 0
Dunmoreway (S.), . .	1 6	2 0	0 30	1 4	1 0	1 6	0 9	1 2	1 4	1 6	0 10	1 4	1 0	1 8	0 9	1 3
Maroon (S.), . . .	1 5	2 5	0 30	1 6	1 0	1 6	0 5	1 2	1 0	1 8	0 5	0 10	0 10	1 0	0 6	0 11
Midleton (S.), . . .	1 3	2 0	1 0	1 2	1 0	1 5	0 9	1 0	1 0	1 0	0 5	0 10	0 5	1 0	0 9	0 10
Skibbereen, . . .	1 4	2 8	0 10	1 3	1 0	1 9	0 5	1 0	1 0	1 6	0 9	1 0	0 9	1 2	0 6	1 0
Skull (S.), . . .	1 3	1 7	0 11	1 11	1 0	1 2	0 5	0 10	1 0	1 10	0 10	0 10	0 10	0 10	0 7	0 8
KERRY COUNTY.																
Castlemore (S.), . . .	3 3	3 6	1 3	2 0	1 0	2 0	0 10	1 0	1 0	2 0	0 10	1 0	1 0	1 2	0 8	0 10
Carrigrohane (S.), . .	2 0	2 6	1 0	1 3	1 0	1 8	0 6	1 0	1 2	1 0	0 8	0 9	0 9	1 0	0 5	0 5
Dingle (S.), . . .	0 8	1 11	1 5	1 7	1 1	1 5	1 0	1 6	1 2	1 3	1 3	1 2	1 4	1 5	0 10	0 11
Kemare, . . .	1 8	2 0	1 0	1 6	1 0	1 6	0 5	0 9	1 0	1 0	0 8	1 0	0 8	1 0	0 8	0 10
Killarney, . . .	2 6	2 8	1 5	2 0	1 0	2 0	1 0	1 8	1 6	2 0	0 6	1 0	0 8	1 0	0 8	0 9
Killarney (S.), . . .	1 5	1 10	0 11	1 4	1 1	1 5	1 1	1 5	1 3	1 6	0 10	1 1	0 8	1 1	0 10	0 10
Lisnakeel (S.), . . .	1 4	1 10	1 5	1 4	1 0	1 4	0 4	1 0	0 10	1 3	0 5	0 10	0 6	0 10	0 6	0 8
Tralee, . . .	1 5	1 10	0 11	1 3	0 10	1 1	0 9	0 11	1 0	1 5	0 8	0 10	0 8	0 10	0 7	0 9
LIMERICK COUNTY.																
Abbeystead (S.), . . .	1 3	2 0	-	-	1 0	1 0	-	-	1 0	1 8	-	-	-	-	-	-
Ulm, . . .	1 6	2 0	1 0	1 4	1 0	1 0	0 30	1 2	1 0	1 6	0 10	1 4	0 10	1 0	0 8	0 10
Red (S.), . . .	1 31	1 10	1 0	1 4	1 0	1 4	0 10	1 0	1 0	1 5	0 7	0 10	0 8	0 10	0 8	0 10
Kilmore (S.), . . .	0 8	0 9	1 0	1 3	1 0	1 0	1 0	1 7	1 0	1 0	1 0	1 0	1 0	1 0	0 10	1 0
Lisnakeel, . . .	1 5	2 0	1 0	1 2	1 4	1 2	0 8	1 0	1 4	1 6	0 10	1 0	1 0	1 2	0 8	0 10
Newcastle (S.), . . .	1 6	2 0	1 1	1 4	1 1	1 4	0 7	0 10	0 10	1 0	0 8	0 10	0 8	0 8	0 5	0 0
New Fallow, . . .	1 5	2 5	0 11	1 3	1 2	1 6	0 10	0 11	0 11	1 3	0 8	0 11	0 10	1 2	0 7	0 10
Northside, . . .	1 5	2 0	0 10	1 3	1 0	1 4	0 9	1 1	1 0	1 2	0 8	0 10	0 9	0 11	0 5	0 8

- (a) Without diet. (b) Women and girls are not as a rule hired by the day in this district during the winter months.
 (c) In nearly every instance two meals are supplied each day in addition to the wages shown in this column.
 (d) The rates per day given include diet in all cases. (e) Without diet.
 (f) Two meals a day are sometimes given, equivalent to 8d. for men, and 6d. for girls, women, and boys, when not employed all the year round at 1s.
 (g) Men.—Employment by the year generally at 12s. to 15s. with board. Boys from 12s. to 15s. Women employed for only a few days in spring and harvest. Girls employed by the year generally at 9s. to 11s.
 (h) Generally without diet. Very little female labour employed in this district.
 (i) Very little employment in districts for agricultural labourers, as the land is not suitable, and the men spend most of their time in fishing, &c.
 (j) The labourers support themselves. (k) The amount shown is generally in addition to diet.
 (l) There is very little employment for women or girls during winter. (m) Diet is also included.
 (n) Seasonal boys are hired at 1s. a quarter. Women not employed in winter. Girls not employed. (o) With diet.
 (p) Without diet.
 (q) The wages in all columns include food. There are few women employed as agricultural labourers during the winter months.

II.—PROVINCE OF MUNSTER—continued.

COUNTIES AND CONGRESSIONAL DISTRICTS	SUMMER.								WINTER.							
	Men		Boys		Women		Girls		Men		Boys		Women		Girls	
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To
TIFFINERY CO., N.B.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Barrackmore, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Neagh, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Newport, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Down, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Templemore, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Thurles, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
TIFFINERY CO., S.E.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Gahr, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Cappawhite, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Carroon-Grange, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Cashel (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Clonmel, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Kilcote (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Thurles, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
WATERFORD CO.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Cappawhite, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Downpatrick (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Downpatrick (B), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Waterford, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

III.—PROVINCE OF ULSTER.

ANTRIM COUNTY.																
Antrim (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Ballymena, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Ballymore (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Belfast East, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Belfast North (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Belfast North West, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Belfast West, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Larne, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Lisburn, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
ARMAGH COUNTY.																
Armagh, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Lough, . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Henry (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Penrhyndarra (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
CAYN COUNTY.																
Ballymore (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Ballymore (B), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Cavan (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Kesh (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Swatara (A), . . .	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

(a) Boys and women not employed in winter. (b) Girls not employed.

(c) Without milk. (d) Women and girls only employed in harvest time and during autumn.

(e) In some cases a dinner is given to the labourers, but normally they supply themselves with food at their own expense.

(f) In the parts of the district where there are mills and factories the wages of agricultural labourers are very high, owing to the difficulty of procuring labour.

(g) In addition all get their food. (h) In some cases the labourers are given their tea in the evening but not always.

(i) With food. (j) With. (k) These cases are given with food.

(l) Without food or report. (m) Without food or report. (n) No women employed in winter on day labourers.

III.—PROVINCE OF ULSTER—continued.

COUNTIES AND CONSTATUTORY DISTRICTS	SUMMER								WINTER							
	Men.		Boys		Women.		Girls.		Men.		Boys		Women.		Girls.	
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To
DOWN COUNTY.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Ards,	1 5	2 5	1 0	1 4	1 1	1 2	0 90	1 2	1 2	1 5	0 10	1 0	0 7	0 9	0 5	0 9
Ballykenny (C), . .	1 5	2 0	1 0	1 5	1 0	1 2	0 10	1 0	1 2	1 5	0 6	1 0	0 10	1 0	0 5	0 9
Barrington (C), . .	1 5	2 0	0 10	1 0	0 10	1 0	0 10	1 0	1 0	1 5	0 5	0 10	0 10	1 0	0 5	0 9
Donaghadee, . . .	1 2	1 5	0 10	0 10	0 10	0 11	0 8	0 9	1 2	1 3	0 7	0 6	0 8	0 8	0 4	0 7
Down,	2 0	2 5	1 5	2 0	1 5	2 0	1 5	2 0	1 5	2 0	1 0	1 5	1 0	1 0	1 0	1 5
Enniskerry, . . .	1 5	2 5	0 8	1 5	0 8	1 3	0 8	1 0	1 0	1 0	0 4	1 0	0 8	0 10	0 4	0 8
Malin (C),	1 5	2 0	1 0	1 5	1 5	1 5	0 9	1 0	1 0	1 5	0 9	1 0	0 9	1 0	0 5	0 9
Raphoe (C), . . .	2 0	2 5	1 5	2 0	1 5	2 0	1 0	1 5	1 5	2 5	0 12	1 0	—	—	—	—
Rathfriland (C), . .	1 0	2 0	1 0	1 2	1 5	1 5	1 0	1 2	1 5	1 5	0 9	0 10	0 10	1 0	—	—
DOWNS COUNTY.																
Enniskerry, . . .	1 5	2 5	1 0	1 5	1 3	2 0	1 0	1 5	1 0	1 5	0 8	1 0	0 10	1 2	0 5	1 0
Enniskerry, . . .	2 0	2 5	1 2	1 5	1 3	1 5	1 0	1 5	1 5	2 5	1 2	1 5	1 2	1 2	0 10	1 0
Downpatrick (C), .	2 5	2 5	1 3	2 0	1 3	1 5	1 0	1 3	1 5	2 5	0 12	1 5	1 5	1 5	0 5	1 0
Newcastle,	2 5	3 0	1 5	2 0	1 5	2 0	1 3	1 5	2 5	2 5	1 3	1 5	1 3	1 5	0 10	1 7
Rathfriland, . . .	1 5	2 0	1 0	1 2	1 3	1 5	0 11	1 3	1 5	1 10	0 12	1 0	1 0	1 0	0 9	0 12
FERRISBURGH COUNTY.																
Downpatrick, . . .	1 5	2 0	0 12	1 0	1 0	1 0	0 10	1 0	1 0	1 5	0 6	0 10	0 10	1 0	0 5	0 12
Enniskerry, . . .	1 5	2 0	0 6	1 0	0 10	1 2	0 8	0 9	1 0	1 5	0 6	0 6	0 6	0 10	0 4	0 5
Kesh (C),	1 5	2 0	0 6	1 0	1 0	1 0	0 8	1 0	0 10	1 5	0 6	0 6	0 10	1 0	0 5	0 8
Larne,	1 5	2 2	1 0	1 5	1 3	1 5	1 0	1 5	1 1	1 5	0 10	1 1	0 10	1 1	0 5	0 12
LONDONDERRY CO.																
Colinva,	2 0	2 5	1 0	1 5	1 3	1 5	1 0	1 5	1 5	2 5	0 12	1 0	1 5	1 5	0 10	1 0
Larne,	1 0	2 1	1 1	1 5	1 1	1 5	0 12	1 0	1 3	1 5	0 8	1 0	0 8	1 0	0 5	1 0
Londonderry, . . .	2 0	2 5	1 5	2 0	1 5	2 0	1 0	1 5	1 5	2 5	1 5	1 5	1 5	1 2	0 10	1 0
Rathfriland, . . .	2 0	2 5	1 5	2 0	1 5	1 10	1 5	1 10	1 5	1 10	1 5	1 3	1 5	1 2	1 0	1 2
MORRIS COUNTY.																
Downpatrick, . . .	1 5	2 2	1 0	1 5	1 0	1 5	0 9	1 0	1 2	1 5	0 11	1 3	0 10	1 0	0 7	0 12
Down,	1 5	1 7	0 11	1 1	0 11	1 1	0 6	0 9	1 0	1 5	0 6	0 10	0 9	0 10	0 7	0 8
Down,	1 5	2 5	1 0	1 5	1 0	1 3	0 8	1 0	1 0	1 5	0 8	1 0	0 6	1 0	0 5	0 9
TYRONE COUNTY.																
Armagh,	1 0	2 5	1 5	2 0	1 3	1 5	1 0	1 5	1 0	1 5	0 12	1 2	0 12	1 5	0 10	1 0
Down,	2 0	2 5	1 5	1 5	1 3	1 5	0 10	1 5	1 5	1 5	0 12	1 2	0 12	1 5	0 5	1 0
Down (C),	1 5	2 0	1 0	1 3	1 0	1 3	0 8	0 10	1 5	1 5	0 5	1 5	0 5	0 10	0 7	0 8
Downpatrick, . . .	2 0	2 5	1 0	1 3	1 0	1 5	0 8	1 0	1 0	2 0	0 12	1 0	0 10	1 0	0 5	1 0
Omagh,	1 5	2 0	1 0	1 5	1 0	1 5	0 12	1 0	1 0	1 5	0 10	1 5	0 10	1 0	0 5	0 12
Rathfriland, . . .	1 10	2 5	1 0	1 5	1 0	1 5	0 10	1 5	1 3	1 5	0 10	1 3	1 0	1 3	0 5	1 0

- (1) With no board. (2) Sleeping and some in winter. (3) Very few women or girls are employed in agricultural labour during winter.
 (4) No women or girls are employed during winter. (5) Labourers have to supply their own food.
 (6) These rates are paid when the labourers supply their own food. (7) Most of the labourers are hired by the tiller, and fed by the farmer's house. (8) Wages—summer, Men 25 to 35, Boys 25 to 35, Women 25 to 35.
 (9) Girls 25 to 35, Men 25 to 35, Boys 25 to 35, Women 25 to 35, Girls 25 to 35.
 (10) Women and girls not much employed in winter.

IV.—PROVINCE OF CONNAUGHT.

COUNTIES AND TOWNLANDS DISTRICTS.	SUMMER.								WINTER.							
	Men.		Boys.		Women.		Girls.		Men.		Boys.		Women.		Girls.	
	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.	From.	To.
GALWAY COUNTY.	8 6	4 4	4 4	4 4	8 6	8 6	4 4	4 4	1 2	1 2	4 4	4 4	4 4	4 4	4 4	4 4
Ashery (A). . . .	1 8	2 0	-	-	1 0	1 0	-	-	1 0	1 0	-	-	1 0	1 0	-	-
Ballinacree (A). . .	1 8	2 0	0 18	1 0	1 2	1 8	0 10	1 0	1 4	1 8	0 5	0 10	0 18	1 0	0 5	0 5
Chilren.	1 8	2 0	1 0	1 4	1 0	1 4	1 0	1 2	1 0	1 8	0 18	1 0	0 10	1 0	0 10	1 4
Chesher (A). . . .	1 2	2 0	0 8	1 2	0 8	1 4	-	-	1 0	1 4	0 4	0 10	0 8	0 10	-	-
Dunmore.	1 0	1 8	0 18	1 2	1 0	1 8	0 10	0 10	1 0	1 8	0 5	0 11	0 8	0 11	0 5	0 10
Galway (A). . . .	1 8	2 2	1 2	1 8	1 0	1 8	0 10	1 2	1 2	1 7	0 10	1 0	0 8	0 11	0 5	0 10
Gort (A).	1 8	2 2	0 18	1 2	1 1	1 8	0 11	1 2	1 0	1 8	0 5	0 11	0 8	1 1	0 8	0 8
Longford (A). . . .	1 5	1 10	0 18	1 1	1 0	1 2	0 11	1 1	1 0	1 5	0 5	0 9	0 7	0 9	0 7	0 8
Marlough.	1 5	2 0	1 0	1 2	1 0	1 2	1 0	1 5	1 5	1 5	0 5	0 10	0 9	1 0	0 5	1 0
Oughlins.	1 8	2 0	1 0	1 2	0 11	1 8	0 10	1 2	1 1	1 8	0 5	0 10	0 8	0 11	0 8	1 1
Portlanna.	1 8	1 8	1 0	1 2	0 9	1 0	0 8	1 0	1 0	1 2	1 0	1 0	0 8	1 0	0 5	1 0
Roundstone (A). . .	1 8	1 8	0 10	1 0	0 10	1 0	0 8	0 10	1 0	1 2	0 5	0 10	-	-	-	-
Spiddin.	1 2	1 6	0 10	1 2	0 10	1 0	0 8	0 11	0 10	1 1	0 5	0 10	0 7	0 8	0 5	0 8
Tonn.	1 2	1 6	1 0	1 8	1 8	1 8	0 8	0 8	1 8	1 8	0 10	1 8	0 10	1 0	0 4	0 8
Woodford.	1 4	1 8	1 0	1 2	1 0	1 2	1 0	1 0	1 0	1 2	0 10	1 0	0 10	1 8	0 10	0 10
LUTHER COUNTY.																
Ballymore (A). . . .	1 2	1 7	0 8	0 10	0 7	0 10	0 8	0 8	0 10	1 2	0 8	0 8	0 8	0 8	0 4	0 8
Carrick-on-Shan (A). .	1 2	1 5	0 10	1 0	0 10	1 2	0 8	0 10	0 11	1 5	0 5	0 10	0 8	0 10	0 5	0 8
Dromahaire (A). . .	1 3	1 8	1 0	1 2	0 10	1 4	0 8	0 10	1 8	1 3	0 10	1 4	-	-	-	-
Manusken.	1 2	1 5	0 8	1 0	0 7	0 10	0 8	0 8	0 10	1 2	0 5	0 8	0 7	0 8	0 5	0 7
Mohill (A).	1 8	1 8	0 10	1 0	0 10	1 0	-	-	1 3	1 3	0 7	0 8	0 8	0 10	-	-
MAYO COUNTY.																
Ballynashannon. . .	1 2	1 8	0 10	1 0	0 10	1 2	0 8	0 10	1 0	1 2	0 8	0 10	0 8	0 10	0 5	0 5
Bellin (A).	1 10	2 4	1 2	2 0	0 10	1 0	0 10	1 0	1 0	1 3	0 10	1 0	-	-	-	-
Bellinacree (A). . .	1 4	1 5	0 10	1 0	0 10	0 11	0 7	0 8	1 1	1 5	0 8	0 8	0 8	0 10	0 8	0 7
Beldar.	1 8	2 0	1 0	1 0	1 0	0 10	1 0	1 0	1 0	1 8	0 10	1 0	0 8	0 10	0 8	0 8
Coolish.	1 8	2 0	0 10	1 0	0 8	0 10	0 8	0 8	1 0	1 8	0 8	1 0	-	-	-	-
Clermont.	1 7	2 0	1 0	1 2	1 0	1 2	0 10	1 0	1 1	1 8	0 8	0 10	0 8	0 8	0 7	0 8
Slawport.	1 8	2 0	1 0	1 0	1 0	1 0	0 8	0 8	1 2	1 8	0 8	1 0	0 10	1 0	0 7	0 8
Strawfield.	1 10	2 1	1 2	1 2	1 0	1 8	0 11	1 1	1 1	1 1	0 10	1 2	0 10	1 1	0 8	0 10
Wentport (A). . . .	1 8	1 8	-	-	-	-	-	-	1 5	1 5	-	-	-	-	-	-
ROSCOMMON COUNTY.																
Arklow.	1 7	1 10	1 8	1 2	1 0	1 8	1 0	1 0	1 0	1 3	0 8	1 0	0 8	1 5	0 8	1 0
Boyle.	1 8	2 4	1 8	1 2	1 0	1 2	0 10	1 0	1 0	1 8	0 8	1 0	0 8	1 0	0 8	0 5
Carraigah.	1 0	1 5	0 8	1 0	0 10	1 0	0 8	0 10	0 10	1 4	0 8	0 10	-	-	-	-
Recessmore (A). . .	1 8	2 0	0 8	1 0	-	-	-	-	1 8	1 8	0 8	1 0	-	-	-	-
Strickland (A). . . .	0 10	1 0	0 8	0 10	0 10	1 8	0 10	1 0	0 8	0 8	0 8	0 7	-	-	-	-
SLEIGH COUNTY.																
Ballymore (A). . . .	1 8	2 0	0 11	1 2	0 11	1 0	0 8	1 0	1 0	1 4	0 8	1 0	-	-	-	-
Colony.	1 8	1 10	0 10	1 2	0 10	1 0	0 8	0 10	1 0	1 4	0 8	0 10	0 8	0 10	0 8	0 8
Derry (A).	1 11	1 10	1 8	1 2	0 10	1 2	0 8	0 11	0 10	1 25	0 8	0 10	0 8	0 10	0 8	0 8
Say.	1 8	2 0	1 8	1 2	1 0	1 2	0 8	0 10	1 7	1 4	0 8	0 11	0 8	0 8	0 7	0 8
Tobacco.	2 4	2 6	1 8	2 4	1 0	1 8	0 8	1 0	1 0	2 0	1 8	1 5	0 8	1 0	0 8	0 8

(1) None, none employed. (2) Women, mostly employed, except by a short time in summer. (3) Girls, none employed.

(4) None and boys without diet. (5) Very few women or girls employed during winter months. (6) Girls are not employed.

(7) Very few women or girls employed in the district. (8) In some parts of this district girls are not employed.

(9) Without benefit. (10) Women and girls, none employed in winter. (11) Very few women or girls employed in district.

(12) The labourers state that themselves out of the number of women shown. No girls employed in the district.

(13) There are no women or girls employed in the district during the winter months in this district.

(14) None are employed in winter. (15) Very few women or girls are employed. Most of the district is under grass, and consequently few labourers are employed.

(16) Without diet. (17) Very few labourers are employed in the district.

(18) Except the women and girls listed half-regularly, there is no employment for them in winter, and then they have 67 to 68 per annum.

(19) Women and girls are employed in winter. (20) In some parts of the district women and girls are not employed in winter months.

In conclusion I have to thank the occupiers and owners of land in general, and also the proprietors and managers of Scutching Mills, Corn Mills, and Dairy Factories, for their courtesy in supplying the information required for the various Returns to the Enumerators; and to add, as I do, with much pleasure, that the members of the Royal Irish Constabulary and the Metropolitan Police who acted as Enumerators discharged their duties as such with their usual efficiency.

I have the honour to remain

Your Excellency's faithful servant,

T. W. GRIMSHAW,

Registrar-General.

GENERAL REGISTER OFFICE,

CHARLEMONT HOUSE, DUBLIN,

17th June, 1899.

DETAILED TABLES

TABLE 1.—Showing, by COUNTIES and PROVINCES, the NUMBER of HOLDINGS, their SIZE in STATUTE ACRES, and the DIVISION of LAND in the Year 1893.

COUNTIES	NUMBER OF HOUSEHOLDS AND OTHER DWELLINGS BY TENURE CLASS								EXTENT OF LAND OWNED										TOTAL AREA				
	Self-sufficing								Total Number of Farms and Other Dwellings, 1920	Crops, Grazing and Other Uses	Cultivated									Woods and Forest Land	Barren Mountain Land	Water, Ponds, Pools, &c.	
	All Land	-0	-10	-20	-30	-40	-50	-60			Acres	Grass	Acres	Acres	Acres	Acres	Acres	Acres					Acres
ARMSTRONG,	2,180	2,260	3,920	3,570	3,420	3,930	470	121	47	22,160	220,526	324,380	1,618	4,896	32,838	7,207	40,158	50,343	714,229				
BARRETT,	5,014	5,074	3,914	4,264	4,193	3,424	340	15	2	20,600	156,966	126,000	424	3,313	6,443	2,229	7,666	16,509	512,925				
CLARK,	1,224	1,204	824	1,064	1,064	824	340	115	5	5,000	17,813	116,120	924	3,241	8,94	9,798	14,743	14,643	225,000				
CATARAUGUS,	2,044	2,040	3,020	3,864	4,473	3,990	220	42	8	30,613	123,652	345,194	340	3,241	22,820	5,061	12,197	14,303	677,006				
CHAMBERS,	1,715	1,708	1,140	1,160	1,160	870	310	342	10	34,419	142,554	347,000	140	1,854	2,320	3,818	17,101	21,462	754,252				
CHEROKEE,	1,860	1,827	4,527	4,664	5,555	5,784	5,212	70	79	37,900	418,100	694,666	1,522	3,763	38,238	30,425	341,775	85,176	1,830,485				
CLINTON,	1,410	1,343	10,233	4,487	4,409	3,168	1,628	44	300	11,610	21,471	69,000	1,020	2,704	16,341	24,364	47,646	39,624	1,180,908				
COLUMBIA,	1,567	1,653	8,940	3,640	3,247	1,744	1,644	42	37	30,939	597,547	122,412	8,383	15,362	2,471	1,087	4,646	21,347	471,707				
CRAWFORD,	2,661	1,242	3,615	3,920	3,920	3,920	340	104	13	3,704	37,500	128,923	463	4,690	-	341	14,428	22,000	422,670				
DECATUR,	738	1,044	1,430	5,935	3,938	1,232	947	47	12	12,447	296,011	727	2,476	16,462	3,401	20,730	29,216	42,670					
DELAWARE,	3,634	4,334	12,291	3,667	3,273	3,686	1,448	300	312	36,319	509,500	747,452	1,037	3,500	129,771	35,364	161,618	61,634	1,960,207				
DODGE,	1,816	1,633	1,161	3,060	3,710	3,640	1,713	191	120	20,270	141,490	127,501	428	1,960	4,960	42,468	20,400	42,468	1,120,216				
DUNDEE,	1,417	1,590	1,871	1,164	794	117	767	307	46	8,749	169,000	356,916	600	4,390	3,423	7,329	15,679	420,400					
ELK,	2,047	1,609	2,103	3,410	5,131	2,130	787	211	16	16,800	126,316	76,968	404	10,720	7,770	4,684	13,365	70,716	491,204				
ELKHAUS,	1,610	1,600	2,020	2,647	3,071	1,129	104	381	20	13,147	124,460	333,662	390	4,407	32,650	16,092	6,660	73,177	438,303				
FRANKLIN,	804	848	1,130	1,454	1,454	802	140	40	8	14,338	29,376	100,000	60	3,600	59,616	5,432	30,491	25,474	278,471				
GREENBURY,	1,812	1,920	2,319	4,650	2,409	2,410	1,204	660	80	19,875	125,350	438,540	316	4,402	12,400								

TABLE 2.—Showing the Proportion per Cent. under Crops (including Meadow and Clover), Grass, Fallow, Woods and Plantations, Turf Bog, Marsh, Barren Mountain Land, and Water, Roads, and Fences, &c., in each County and Province in Ireland in 1898.

COUNTRIES	PROPORTION FOR CENS. YEARS							COUNTRIES	PROPORTION FOR CENS. YEARS							
	Engl. Incl. in Males and Clergy	Cont.	Father	Widow and Female Sols	Tot. Sol.	Male	Seven Men to Land		Engl. Incl. in Males and Clergy	Cont.	Father	Widow and Female Sols	Tot. Sol.	Male	Seven Men to Land	Wid. to Total, Cont. &c.
ASTORIA, . . .	415	48 3	2	3	34	11	38	50	138	60 3	-1	2	20 3	20	27 4	3 4
AMERICA, . . .	62 4	44 3	1	11	21	3	33	55	29 3	74 4	-1	17	3 3	4	1	4 6
CALIFORNIA, . . .	32 6	33 4	-	3 6	4	12	3	33	27 3	38 9	-1	14	3 3	-3	3	7 3
CANADA, . . .	28 6	34 3	-	12	3 0	16	29	73	22 6	32 3	-1	2 6	4 3	4	4	3 7
CHINA, . . .	18 3	61 1	-	1 0	34	13	301	4 3	29	68 3	-1	12	1 3	1 3	3 0	3 0
CHINA, . . .	22 6	22 4	1	16	14	3 6	33 1	4 3	37 3	33 3	2	14	7 7	14	14	3 7
CHINA, . . .	18 3	33 4	-	3 3	8 3	4	3 3	59	30 6	40 4	-	3 3	3 7	1 9	14 3	4 3
CHINA, . . .	67 1	42 3	-	3 2	4	6	4 3	34	39 6	34 3	-	4 3	3	3 2	32	4 3
CHINA, . . .	32 4	34 3	-	3 16	4	2	6	3 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	24 7	34 3	-	13	4 7	6	3 3	5 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	14 6	43 7	-	1 15	8 3	3 6	17 4	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	12 3	43 6	-	1 14	8 3	3 6	17 4	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	24 8	31 3	-	2	1 5	7 3	3	3 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	22 4	31 3	-	1	2 0	3	3 1	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	22 9	40 3	-	1	13	10 3	20	14	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	21 6	40 3	-	3	3 2	9	3 1	6 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	22 6	40 3	-	1 3	1 6	3	3 1	6 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	30 7	40 3	-	9	4 3	6	14 3	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	34 3	30 3	-	3 4	11 3	1 3	3 3	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	42 6	44 3	-	2 3 0	4	3	6 4	4 7	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	21 6	40 3	-	3	3 2	9	3 1	6 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	22 6	40 3	-	1 3	1 6	3	3 1	6 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	30 7	40 3	-	9	4 3	6	14 3	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	34 3	30 3	-	3 4	11 3	1 3	3 3	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	42 6	44 3	-	2 3 0	4	3	6 4	4 7	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	21 6	40 3	-	3	3 2	9	3 1	6 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	22 6	40 3	-	1 3	1 6	3	3 1	6 3	30 6	34 3	-1	1 3	3 4	2	14	2 4
CHINA, . . .	30 7	40 3	-	9	4 3	6	14 3	4 3	30 6	34 3	-1	1 3	3 4	2	14	2 4

TABLE 3.—Showing, by POOR LAW UNIONS, the NUMBER of HOLDERS, their SIZE in SQUARE ACRES, and the DIVISION of LAND in the YEAR 1888.—continued

[illegible]

WHEAT CROPS IN THE YEAR 1898; THE VALUATION IN 1898, AND THE POPULATION IN 1891.

IN STATUTE ACRES.							ESTIMATE FOR EACH CROP.				Valuation in 1898.	Population in 1891.	COUNTIES.
CEREAL CROPS.							WHEAT.	BARLEY.	RYE.	OATS.			
Number of Holdings.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	£		
26	415	225	49	321	53,418	7,301	47,555	48,359	225,338	1,524,964	428,228		ASTORIA.
21	308	189	27	170	33,897	3,714	30,333	32,647	135,568	416,481	163,289		ARMON.
118	637	14	13	284	16,679	-	16,359	16,368	75,816	165,234	60,586		CARLEW.
47	1,379	39	55	753	36,646	933	15,445	54,538	132,415	378,503	111,547		CAYNE.
117	1,085	53	46	808	39,745	4	4,596	85,516	142,564	319,639	124,183		CLARE.
451	4,789	1,638	595	1,413	166,402	57	61,367	325,542	418,139	1,255,485	436,632		CORR.
24	2,321	345	58	896	62,823	4,799	36,667	41,734	217,491	392,638	185,626		DORSET.
91	700	305	55	1,459	64,664	5,372	65,541	9,587	335,447	590,431	247,458		DOWN.
149	1,090	47	18	1,338	12,761	-	10,549	30,582	78,609	1,567,486	418,516		DUBLIN.
6	586	15	5	551	18,966	337	4,739	55,469	89,818	260,947	74,376		FARMINGTON.
36	7,073	25	2,007	861	54,415	2	13,757	83,662	293,308	479,310	514,718		GAULWAY.
125	4,054	16	63	316	46,848	3	7,685	68,839	357,323	590,510	179,136		KERRY.
55	303	45	139	366	15,739	-	17,069	37,371	203,566	339,537	79,296		KILGARR.
64	1,594	95	11	531	59,907	1	24,561	36,968	135,816	368,718	87,581		KILKENNY.
32	750	29	47	395	56,238	-	14,549	37,645	112,746	244,136	65,583		KINSH.
9	1,278	6	1	438	16,941	12	1,435	59,545	76,374	137,947	76,686		LEITH.
138	2,128	15	11	515	52,156	-	7,497	166,227	186,346	538,693	150,542		LIMERICK.
43	652	70	14	924	62,558	6,265	33,479	13,719	479,845	467,357	192,069		LONGFORD.
6	1,616	2	17	431	15,885	4	4,964	33,575	63,691	153,868	59,647		LONGFORD.
86	356	192	8	661	16,938	26	16,238	8,523	92,686	213,294	71,685		LOUTH & DUBLIN, County of Town.
55	2,375	33	166	1,826	22,095	155	16,248	66,547	137,526	518,219	219,634		MASS.
115	454	69	136	728	17,960	1	15,452	66,868	117,914	252,890	78,367		MERTH.
15	438	23	36	843	31,044	1,425	25,394	16,561	119,004	274,707	85,306		MIDLEHAM.
64	733	13	315	416	19,763	-	23,236	40,590	136,772	566,457	14,832		QUINN'S.
1	1,151	26	305	728	37,774	-	4,436	85,391	117,373	287,294	114,397		ROSTOMAN.
18	1,136	-15	16	713	98,847	27	6,796	22,587	76,852	519,089	96,813		SALVO.
101	3,661	96	375	377	65,584	-	34,065	180,583	353,268	685,698	272,366		TIFFINBY.
51	1,833	91	26	1,693	53,689	5,649	35,622	39,776	257,768	457,665	171,491		TYRONE.
27	1,492	95	39	538	22,368	-	15,145	6,331	74,833	320,385	96,281		WATERFORD.
41	596	17	162	595	15,735	-	7,310	45,561	81,567	318,367	65,308		WATERLOO.
172	1,645	55	49	331	45,551	-	40,225	26,486	195,465	277,408	111,778		WATSON.
35	523	39	92	376	15,819	-	13,826	61,637	55,167	237,541	83,136		WINDLOW.
													PROVINCES.
919	4,795	458	1,372	6,419	261,847	45	303,408	411,739	1,226,385	4,855,629	1,137,740		LEONTER.
1,559	13,303	1,663	614	3,582	271,965	73	329,378	894,329	1,185,293	3,469,161	1,179,462		MIDWAY.
568	7,716	1,302	318	7,732	398,913	24,013	398,924	506,236	1,589,365	6,947,344	1,615,814		ULSTER.
124	8,943	117	5,861	4,739	176,309	146	56,342	279,696	624,285	1,688,749	724,774		CHICKADEE.
2,668	44,253	3,480	4,798	22,027	1,161,967	54,469	692,040	1,225,430	4,184,960	14,617,733	4,764,799		TOTAL.

Galaxy, which have been omitted from the calculations relating to the estimated produce of the crops, and the yield per acre, as no reliable can be given of what the yield would be if the crops were allowed to ripen in the ordinary way.

TABLE 6.—SHOWING, BY COUNTRY AND PROVINCES, THE

COUNTIES.	PRODUCE OF						
	CEREALS AND FRUIT.						
	Wheat.	Oats.	Barley.	Maize.	Rye.	Potatoes.	Fruit.
	Cwt. of 112 lbs.	Cwt. of 112 lbs.	Cwt. of 112 lbs.	Cwt. of 112 lbs.	Cwt. of 112 lbs.	Cwt. of 112 lbs.	Cwt. of 112 lbs.
ARMAGH,	28,867	1,214,968	17,965	"	378	14,552	258
ARMAGH,	28,867	877,677	1,836	"	3,044	269	120
CARRICK,	7,726	393,373	54,961	36	70	"	"
CELTIC,	6,264	445,034	515	"	3,106	156	56
CLARE,	17,968	212,021	16,837	54	14,737	450	"
CLARE,	166,742	1,726,260	219,539	125	3,825	108	94
DOUGLAS,	4,680	1,562,016	4,876	66	7,732	1,836	896
DOW,	298,474	1,608,000	34,761	56	1,363	9,035	1,641
DUBLIN,	168,393	998,790	37,179	43	823	162	910
FERRIS,	19,016	512,850	45	92	3,561	163	"
GALWAY,	61,404	692,282	63,929	267	26,566*	26	140*
KERRY,	36,812	312,169	21,819	46	5,432	66	"
KILBARR,	26,162	309,403	104,939	55	3,366	40	72
KILBARR,	41,436	338,365	280,069	"	354	"	"
KING,	3,769	226,276	251,825	56	3,919	"	"
LIMERICK,	366	114,536	29	"	3,065	"	"
LIMERICK,	45,076	224,687	9,640	"	1,624	54	24
LONDONDERRY,	21,039	1,215,444	25,466	108	6,022	3,236	212
LONDON,	4,587	338,224	56	"	3,514	"	"
LOVE and DUBLIN, County of York.	91,877	393,462	278,072	59	459	229	293
MAY,	17,964	613,126	6,635	76	29,036	26	36
MAY,	22,162	378,366	12,453	36	664	64	72
MURRAY,	6,660	564,126	12,873	63	487	197	12
QUEEN,	2,614	424,727	363,506	149	80	"	16
ROBINSON,	5,278	254,669	7,071	127	14,774	32	34
ROSE,	5,663	242,493	5,666	13	5,863	"	"
THURSTON,	45,635	762,032	346,666	79	1,121	"	30
THURSTON,	21,244	1,368,133	86	12	3,644	131	24
WARRICK,	11,669	555,156	33,569	"	826	133	12
WARRICK,	1,125	225,492	6,636	266	3,317	15	"
WARRICK,	55,029	564,964	176,049	72	361	3,496	31
WARRICK,	22,176	372,464	6,292	"	294	15	"
PROVINCES.							
LEINSTER,	531,655	4,611,561	5,898,558	639	14,362	16,896	1,379
MUNSTER,	553,032	3,754,125	738,466	289	26,336	315	69
ULSTER,	836,676	6,340,582	69,413	427	57,138	24,636	3,261
CONVENT,	26,836	1,537,377	69,179	492	63,179*	146	266*
TOTAL,	894,812	18,684,258	6,778,616	2,037	137,866*	39,693	4,937*

* See Note (4) pages 36 and 38.

PRODUCT OF THE CROPS IN THE YEAR 1898.

THE CROPS.								HAY.			QUANTITIES.
Grass Crops.								Hay.			
Produce.	Straw.	Wheat and Barley.	Grass and Clover.	Straw.	Produce.	Straw.	Produce.	Produce of 14 Tons.	Produce of 14 Tons.	Produce of 14 Tons.	
Tons.	Straw.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
152,416	172,861	5,898	499	3,442	1,892	1,919	288,255	133,732	173,469	ASTHUR.	
166,968	132,622	8,853	196	2,385	1,592	479	37,574	63,696	69,121	ARMON.	
41,367	111,963	16,285	1,189	6,685	189	159	"	32,015	43,515	CARLOW.	
118,860	54,098	12,763	347	34,917	129	623	31,753	42,692	155,438	CAYAR.	
53,536	74,513	45,283	1,189	37,484	161	225	309	11,704	258,225	CLARE.	
229,196	529,454	261,615	6,705	46,979	14,545	3,968	2,484	139,557	289,694	CRICK.	
164,493	318,917	8,261	353	28,968	2,553	559	159,183	26,249	32,190	DONOGAL.	
246,714	331,806	19,587	819	18,357	4,961	598	171,863	120,477	50,236	DOWD.	
40,439	38,346	15,161	1,452	17,213	260	144	"	55,549	74,131	DEGLIN.	
52,427	64,471	18,459	55	6,389	170	59	7,773	12,571	159,579	FERMANAGH.	
173,629	171,741	40,025	394	27,285	585	14,125	96	32,953	169,171	GALWAY.	
92,236	82,716	36,945	1,644	30,797	90	456	80	17,624	184,864	KILPAT.	
24,657	389,225	25,085	461	3,919	475	1,159	"	38,300	84,314	KILKEAR.	
47,282	174,673	34,467	487	14,332	159	42	29	53,969	35,426	KILKERRY.	
45,557	162,226	30,674	473	6,616	282	4,793	"	36,947	89,538	KIRK'S.	
49,305	14,328	3,512	54	12,585	80	8	584	3,465	156,225	LATHAM.	
10,559	69,491	23,555	1,257	21,791	163	96	"	17,566	256,696	LAWSON.	
137,997	178,884	6,938	489	9,564	264	145	164,061	79,373	24,525	LEWISBURGH.	
43,389	25,169	6,463	48	10,551	50	136	124	16,792	56,836	LEWISBURGH.	
54,673	159,976	9,816	304	9,073	1,163	39	735	36,416	18,632	LOFTY and DEERHILL, County of TOWN.	
285,319	180,230	35,537	484	25,565	413	696	3,309	23,869	123,379	MAGE.	
24,331	180,061	25,434	1,776	4,729	368	4,533	" 29	33,291	166,564	MEATH.	
65,962	129,649	11,309	125	3,347	415	599	29,854	57,257	45,863	MERRIDON.	
63,964	243,590	35,696	694	6,079	139	1,826	"	54,457	69,979	QUINN'S.	
99,534	36,542	17,973	29	18,567	191	3,563	"	12,826	179,553	ROSCOMMON.	
69,616	47,461	12,471	106	16,007	189	189	1,754	15,293	67,259	SLIGO.	
66,622	245,899	69,949	3,546	45,614	685	892	"	73,894	218,565	TIPPERARY.	
173,938	289,689	9,135	366	13,283	515	996	155,628	83,689	137,968	TYRONE.	
45,792	116,389	66,961	694	9,376	140	97	"	36,596	30,693	WATERFORD.	
14,292	64,447	15,168	499	19,011	347	1,753	"	19,856	180,692	WATERFORD.	
54,766	486,285	29,287	1,989	13,967	653	245	"	115,692	51,196	WEXFORD.	
15,963	123,667	22,695	399	4,419	114	796	"	38,719	91,637	WICKLOW.	
PROVINCES.											
556,611	1,797,061	115,943	3,413	106,945	4,349	11,297	980	592,838	556,225	LEINSTER.	
867,799	1,211,125	499,495	12,026	176,729	16,526	5,981	2,859	389,660	1,583,222	MUNSTER.	
1,207,843	1,794,889	89,641	3,215	67,444	15,076	4,663	1,967,021	640,656	661,739	ULSTER.	
967,868	389,619	182,459	1,163	191,222	1,846	10,384	3,817	56,938	726,064	CONNAUGHT.	
3,543,295	5,184,589	1,998,573	16,823	496,524	34,494	40,665	1,013,547	1,327,628	3,745,993	TOTAL.	

TABLE 7.—SHOWING, BY POOR LAW UNIONS, THE EXTENT OF LAND UNDER

POOR LAW UNIONS.	LAND, GRASS, AND FRUIT.										EXTENT UNDER CROPS.		
	Wheat	Oats	Barley	Beans	Peas	Turns	Potatoes	Total	Grass	Hay	Straw	Wheat	Barley
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
ABINGDON,	21	7,130	3,265	2	2	62	2	12,498	4,551	3,782	714		
ANDOVER,	496	11,537	2					12,447	4,551	3,782	714		
ARLETON,	349	8,366	3,796	3	8	12	12	12,447	4,551	3,782	714		
ASHLEY,	454	25,954	41		35	5		26,035	12,512	4,551	714		
ASHLEY,	135	3,664	63	10	287			4,055	4,551	3,782	714		
ATON,	552	11,143	13,348		35			24,526	4,551	3,782	714		
BALDINGHAM,	47	6,416						6,416	4,551	3,782	714		
BALDINGHAM,	37	4,632	35		100			4,767	4,551	3,782	714		
BALDINGHAM,	39	4,414	385		236		112	5,153	4,551	3,782	714		
BALDINGHAM,	625	6,912	50	3	153			7,543	4,551	3,782	714		
BALDINGHAM,	2	5,478	598		5			6,081	4,551	3,782	714		
BALDINGHAM,	136	3,401			5	244		3,650	4,551	3,782	714		
BALDINGHAM,	131	14,457	6		14			14,487	4,551	3,782	714		
BALDINGHAM,	21	65,172	2		4			65,178	4,551	3,782	714		
BALDINGHAM,	31	5,736			31	60		5,827	4,551	3,782	714		
BALDINGHAM,	136	265	445		6			582	4,551	3,782	714		
BALDINGHAM,	1,117	4,435	1,067		72			5,681	4,551	3,782	714		
BALDINGHAM,	34	7,244	311		16			7,591	4,551	3,782	714		
BALDINGHAM,	259	21,087	2					21,091	4,551	3,782	714		
BALDINGHAM,	245	6,943	360		2			7,548	4,551	3,782	714		
BALDINGHAM,	277	1,456			3			1,464	4,551	3,782	714		
BALDINGHAM,	11	2,732			3			2,739	4,551	3,782	714		
BALDINGHAM,	138	2,155	7					2,169	4,551	3,782	714		
BALDINGHAM,		2,842	269		482			3,593	4,551	3,782	714		
BALDINGHAM,	220	3,767	5,326		2			9,115	4,551	3,782	714		
BALDINGHAM,	1	3,904			32			3,936	4,551	3,782	714		
BALDINGHAM,		3,772			24			3,796	4,551	3,782	714		
BALDINGHAM,	712	4,981	1,022					6,705	4,551	3,782	714		
BALDINGHAM,	496	10,442	4,131		3			15,012	4,551	3,782	714		
BALDINGHAM,	173	4,759	487		3			5,249	4,551	3,782	714		
BALDINGHAM,	4	3,256			133			3,260	4,551	3,782	714		
BALDINGHAM,	329	6,211	13					6,224	4,551	3,782	714		
BALDINGHAM,	622	5,525	1,616		4			7,143	4,551	3,782	714		
BALDINGHAM,	130	3,338	16		175			3,529	4,551	3,782	714		
BALDINGHAM,	2	15,125	2		2			15,129	4,551	3,782	714		
BALDINGHAM,	15	3,216	1,162					4,378	4,551	3,782	714		
BALDINGHAM,	25	6,140						6,140	4,551	3,782	714		
BALDINGHAM,		6,413			68			6,481	4,551	3,782	714		
BALDINGHAM,		1,709						1,709	4,551	3,782	714		
BALDINGHAM,	227	5,944	4		64			6,012	4,551	3,782	714		
BALDINGHAM,	697	3,317	67		7	18		3,399	4,551	3,782	714		
BALDINGHAM,	30	7,606	33		228			7,867	4,551	3,782	714		
BALDINGHAM,		3,019	51		768			3,838	4,551	3,782	714		
BALDINGHAM,	1,690	4,176	25					4,221	4,551	3,782	714		
BALDINGHAM,	389	9,931	1					9,932	4,551	3,782	714		
BALDINGHAM,	398	4,079	1,241		34			5,352	4,551	3,782	714		
BALDINGHAM,	295	4,430			19			4,449	4,551	3,782	714		
BALDINGHAM,	356	3,636	35					3,671	4,551	3,782	714		
BALDINGHAM,	28	10,220	755		10	22		11,027	4,551	3,782	714		
BALDINGHAM,	681	15,992	2		171			16,165	4,551	3,782	714		
BALDINGHAM,	25	11,822	4		7			11,833	4,551	3,782	714		
BALDINGHAM,	215	15,866	2,253		12			18,127	4,551	3,782	714		
BALDINGHAM,	361	524	60		33			437	4,551	3,782	714		
BALDINGHAM,	543	1,949	19					1,968	4,551	3,782	714		
BALDINGHAM,	35	3,942	6		31			4,009	4,551	3,782	714		
BALDINGHAM,	35	2,328	367		596			2,691	4,551	3,782	714		
BALDINGHAM,	31	2,081			53			2,134	4,551	3,782	714		
BALDINGHAM,	3,499	26,449	23		64	22		31,147	4,551	3,782	714		
BALDINGHAM,	309	6,648	2,545		3			9,196	4,551	3,782	714		
BALDINGHAM,	30	4,131	150		162			4,343	4,551	3,782	714		
BALDINGHAM,	1,022	1,707	451		5			2,185	4,551	3,782	714		
BALDINGHAM,	407	1,795	71					1,866	4,551	3,782	714		
BALDINGHAM,	311	13,023	7,595		26			20,645	4,551	3,782	714		
BALDINGHAM,	5	5,433	62		26			5,500	4,551	3,782	714		
BALDINGHAM,	333	5,724			101			5,825	4,551	3,782	714		
BALDINGHAM,	199	4,681	297		5			5,083	4,551	3,782	714		
BALDINGHAM,	245	3,696			69			3,765	4,551	3,782	714		
BALDINGHAM,	110	1,622						1,622	4,551	3,782	714		
BALDINGHAM,	130	4,650	1,266		125			5,941	4,551	3,782	714		
BALDINGHAM,	330	2,480			130			2,610	4,551	3,782	714		
BALDINGHAM,	1,484	10,667	11,660					22,347	4,551	3,782	714		
BALDINGHAM,	135	4,654			5			4,659	4,551	3,782	714		
BALDINGHAM,	22	629	19		153			771	4,551	3,782	714		
BALDINGHAM,	307	10,771	165		4			10,940	4,551	3,782	714		
BALDINGHAM,	738	3,736			30			3,766	4,551	3,782	714		
BALDINGHAM,	1	5,007			37			5,008	4,551	3,782	714		
BALDINGHAM,	1,367	11,636	161		7			11,805	4,551	3,782	714		
BALDINGHAM,		2,263	1,122		7			3,392	4,551	3,782	714		
BALDINGHAM,	825	2,263	1,122		7			3,392	4,551	3,782	714		

* See note (*), pages 35 and 36.

TABLE 8.—SHOWING, BY FOOD LAW UNIONS, THE

FOOD LAW UNIONS.	PRODUCE.							
	CORN, GRAIN, AND FEEDS.							
	Wheat.	Oats.	Barley.	Rye.	Yr.	Beans.	Peas.	
	Ordnal of 1898.	Ordnal of 1898.	Ordnal of 1898.	Ordnal of 1898.	Ordnal of 1898.	Ordnal of 1898.	Ordnal of 1898.	Ordnal of 1898.
ABINGDON,	347	151,330	34,069					
ABINGDON,	6,157	130,711	82		49	1,180	310	
ABINGDON,	15,476	141,548	82,552	36	116	59	580	
ABINGDON,	12,171	202,558	143		712	134	24	
ABINGDON,	1,861	75,302	1,214	283	4,315			
ADAM,	30,089	102,063	224,538		545		45	
ADAM,	607	95,063				16	56	
ADAM,	154	109,050	229		1,154			
ADAM,	1,627	73,010	8,361		9,737			
ADAM,	12,417	77,507	275	68	1,940			
ADAM,	48	145,911	12,071		78	6,189	14	
ADAM,	2,252	3,000	36	21	205			
ADAM,	2,254	323,536	124		24	84		
ADAM,	329	336,413	46		36	125		
ADAM,	1,405	30,160			1,392	1,326	8	
ADAM,	3,000	4,302	9,047		54			
ADAM,	20,541	100,769	21,811		7,209	35	112	
ADAM,	718	142,350	5,449		162			
ADAM,	6,129	318,247	31					
ADAM,	4,436	104,070	7,456		30			
ADAM,	6,522	25,361	17		42			
ADAM,	134	54,482	26		76			
ADAM,	2,307	61,432	147			279	16	
ADAM,		35,312	2,379		5,362			
ADAM,	3,509	94,801	101,678		41		26	
ADAM,	13	60,819	15	91	1,359			
ADAM,		26,160	16		507			
ADAM,	13,616	75,344	20,660					
ADAM,	7,623	207,550	24,612	30	74			
ADAM,	4,124	226,364	11,161	65	35			
ADAM,	54	38,030			1,892			
ADAM,	5,715	126,391	961			118		
ADAM,	10,470	125,336	30,506	12	22			
ADAM,	1,590	68,311	430	32	4,165	26	26	
ADAM,	30	106,908	38		23			
ADAM,	526	43,435	20,418		26			
ADAM,	386	103,977						
ADAM,		45,360			1,123	30	26	
ADAM,		10,005						
ADAM,	4,678	144,045	29		1,804			
ADAM,	15,419	79,825	1,050		168	17	254	
ADAM,	477	135,554	304		2,630			
ADAM,	125	31,207	1,741	13	8,535			
ADAM,	29,409	374,348	566	13				
ADAM,	1,419	134,558	14		74	70	24	
ADAM,	27,605	63,167	25,307		296			
ADAM,	4,845	34,305			176			
ADAM,	16,534	65,631	433					
ADAM,	407	311,609	16,664		141	285	36	
ADAM,	8,566	135,544	26		1,771			
ADAM,	491	135,338	94		113	160		
ADAM,	4,130	277,266	46,466		144			
ADAM,	3,250	3,894	777		694			
ADAM,	8,595	32,817	127			56	13	
ADAM,	582	47,434	230	15	669			
ADAM,	159	57,512	2,816		2,367			
ADAM,	247	41,779	24		704	135		
ADAM,	111,735	399,758	1,731		834	293	605	
ADAM,	8,445	116,954	90,194	36		40	69	
ADAM,	575	62,602	5,124	15	2,514			
ADAM,	24,302	43,199	6,217	28	194	26	324	
ADAM,	17,771	36,029	1,068			32	64	
ADAM,	7,508	232,421	144,011	30	469	220	18	
ADAM,	62	49,673	600	10	1,511	14	24	
ADAM,	4,916	590,318	14		1,517	352		
ADAM,	5,131	90,819	7,345					
ADAM,	5,116	94,705			73			
ADAM,	5,606	61,834	181		22	14		
ADAM,	5,375	95,474	24,709	56	1,528	43		
ADAM,	5,891	41,150	969		1,164	249		
ADAM,	21,637	294,222	296,652			31		
ADAM,	2,044	82,122	30	63	2,400	69		
ADAM,	140	10,412	146	48	2,600	30		
ADAM,	4,667	249,769	2,008		43		12	
ADAM,								
ADAM,	12,874	55,207	6,779	120	6,628	43	126	
ADAM,	12	90,518	65		1,710			
ADAM,		50,609	1,161	79	6,710			
ADAM,	15,208	171,756	35,305	52	48	355	28	
ADAM,	14,257	31,507	21,408	30	315			

PRODUCT OF THE CROPS IN THE YEAR 1898.

[illegible]

TABLE 2.—GROWING, BY POOR LAW UNIONS, THE

POOR LAW UNIONS.	PRODUCE						
	CORN, GRASS, AND STRAW.						
	Wheat.	Oats.	Barley.	Peas.	Beans.	Turns.	Other.
	Cords of 112 lbs.	Cords of 112 lbs.	Cords of 112 lbs.	Cords of 112 lbs.	Cords of 112 lbs.	Cords of 112 lbs.	Cords of 112 lbs.
GRAND,	1,137	55,967	20	—	672	18	—
GRAND,	40	20,000	4,000	—	2,000	—	—
GRAND,	1,404	60,540	15	13	600	60	—
KANTER,	9,021	70,000	707	—	30	—	—
KELLY,	824	390,716	45	—	192	—	—
KELLY,	—	20,370	16	—	90	—	—
KELLY,	10,029	80,302	—	—	—	—	—
KELLY,	12,561	50,011	102,000	—	—	—	—
KELLY,	9,004	14,500	190	50	2,000	—	—
KELLY,	—	30,540	400	—	200	—	—
KELLY,	9,470	32,540	60	—	200	—	—
KELLY,	100	31,200	700	—	40	—	—
KELLY,	7,804	40,000	20	—	20	—	—
KELLY,	507	24,037	600	—	2,000	—	—
KELLY,	8,002	102,676	46,775	20	24	10	—
LARKE,	5,001	150,000	100	—	50	7,000	42
LARKE,	—	102,171	15	—	—	—	6
LARKE,	1,718	200,000	5,100	90	4,210	2,000	200
LARKE,	2,400	30,451	600	—	1,000	—	—
LARKE,	17,030	300,000	207	30	1,000	200	100
LARKE,	2,540	100,700	500	—	100	—	—
LARKE,	4,100	75,000	—	10	600	40	—
LARKE,	4,471	60,000	5,000	40	2,600	—	—
LARKE,	604	42,000	—	—	—	610	300
LARKE,	1,402	61,000	—	—	2,100	—	—
LARKE,	7,711	65,700	370	—	622	—	—
LARKE,	10,000	142,000	4,200	—	1,000	310	50
LARKE,	1,710	110,000	310	10	—	—	10
LARKE,	17,770	300,000	600	20	1,000	—	—
LARKE,	5,300	100,000	100	—	30	—	—
LARKE,	10	24,000	—	—	1,000	—	—
LARKE,	4,000	300,000	100,000	90	20	—	—
LARKE,	10	30,000	2,600	—	970	30	700
LARKE,	5,500	30,000	—	—	—	—	—
LARKE,	4,100	60,000	22	—	30	—	—
LARKE,	70	42,000	1,000	—	2,000	—	—
LARKE,	1,000	210,000	60	—	300	100	10
LARKE,	600	60,000	200	10	700	—	—
LARKE,	500	100,000	100,000	100	100	—	10
LARKE,	500	30,000	1,000	10	100	—	—
LARKE,	4,011	140,000	10,000	—	2,100	—	—
LARKE,	5,000	40,000	100	—	10	—	—
LARKE,	100	100,000	51,000	—	600	—	—
LARKE,	5,000	40,000	30	—	100	—	—
LARKE,	10,000	200,000	200,000	—	30	60	—
LARKE,	5,000	200,000	200	—	30	40	60
LARKE,	55,000	307,100	10,000	20	400	1,000	100
LARKE,	200	71,000	200	—	80	—	—
LARKE,	60	400,000	—	—	400	210	—
LARKE,	4,000	30,000	2,000	—	4,000	—	—
LARKE,	5,100	100,000	100,000	60	2,100	—	10
LARKE,	11,000	30,000	4,000	20	600	—	—
LARKE,	7,000	30,000	1,000	20	30	—	—
LARKE,	5,100	100,000	5,000	—	10	10	—
LARKE,	10,000	60,000	900	—	30	—	—
LARKE,	2,500	37,000	40	—	2,000	—	—
LARKE,	1,100	34,000	40,000	—	300	—	—
LARKE,	1,100	91,000	670	—	1,000	10	10
LARKE,	570	141,000	5,000	—	30	—	—
LARKE,	11,000	70,000	30	—	1,000	—	—
LARKE,	9,000	37,000	1,000	20	600	—	—
LARKE,	3,000	70,000	30	—	5,000	—	—
LARKE,	6,000	60,000	—	—	410	50	—
LARKE,	100	100,000	—	—	20	—	—
LARKE,	900	50,000	—	20	2,000	—	—
LARKE,	—	140,740	240	—	4,470	—	—
LARKE,	4,700	110,000	80,000	—	100	—	—
LARKE,	340	67,000	100,000	—	10	—	—
LARKE,	4,000	77,000	4,000	—	300	—	—
LARKE,	17	60,000	—	—	600	—	—
LARKE,	9,000	71,000	17,000	—	400	—	—
LARKE,	6,000	60,000	60	—	540	—	—
LARKE,	8,000	100,000	1,000	—	4,000	30	—
LARKE,	1,700	20,000	30	—	2,000	30	—
LARKE,	800	141,170	100,000	—	240	—	—
LARKE,	1,000	31,000	67,000	—	—	—	—
LARKE,	5,000	100,000	4,000	—	40	10	—
LARKE,	1,000	60,000	300	—	5,170	—	—
LARKE,	20,000	50,000	100,000	—	170	2,400	—
LARKE,	4,000	110,000	50,000	—	—	—	—
TOTAL,	204,115	10,000,000	2,000,000	2,000	107,000	35,000	4,000

PRODUCE OF THE CROPS IN THE YEAR 1898—continued.

OF THE CROPS.										H.A.		FOUR LAST UNIONS.
CEREAL CROPS.										Cereals, Date and Quantity of Seed, and Quantity of Seedling.		
Produce.	Barley.	Wheat and Rye.	Oats and Potatoes.	Grain.	Turnips.	Rape.	Flax.	Hay.	Straw.	Yield.	Yield.	
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
25,513	15,025	4,509	25	5,116	89	135	290	5,615	42,513	GRAPE.		
31,212	35,144	1,815	28	6,520	1,579	469	5,040	7,446	2,174	APPLES.		
18,802	16,181	775	9	576	99	39	5,165	5,546	20,500	SPINACHES.		
12,646	17,360	4,593	108	4,244	550	745		7,501	61,219	KALE.		
18,808	16,502	2,979	338	2,119	77	389	30	7,486	26,551	KELLS.		
7,536	6,546	1,745	6	5,654		213		807	19,554	KORNER.		
31,672	15,709	772	6	290		39	19,561	16,952	910	KUMBER.		
9,809	36,855	6,724	183	5,142	40	14	20	12,605	30,605	KUMBER.		
2,516	1,116	576	64	1,520	62	7		139	85,725	KUMBER.		
9,809	6,544	4,491	20	861				643	897	KUMBER.		
21,713	16,352	4,663	160	7,365	44	42		4,482	36,519	KUMBER.		
9,846	16,456	10,500	44	5,019	37			5,417	1,284	KUMBER.		
9,846	16,456	10,500	44	5,019	37			1,238	67,497	KUMBER.		
10,655	15,945	10,500	88	5,711	374		106	68,411	68,411	KUMBER.		
11,392	35,130	10,758	252	5,829	364			8,924	6,571	KUMBER.		
21,583	30,784	884	38	497	104	690	5,554	17,586	34,406	LARD.		
15,549	47,535	181	44	4,271	84		30,977	15,584	5,586	LARD.		
21,583	30,784	1,617	268	4,684	408	72	21,945	15,426	3,580	LARD.		
17,887	25,524	15,519	341	5,545	795	25		6,649	25,138	LARD.		
43,263	45,643	1,925	387	1,289	453	43	14,838	34,670	22,331	LARD.		
13,725	39,600	3,297	131	5,589	18	18		7,386	2,363	LARD.		
16,512	15,655	3,549		2,296	70	36	3,948	4,444	49,520	LARD.		
15,215	22,197	16,890	675	7,595		116		3,735	45,780	LARD.		
36,126	106,134	2,558	355	5,780	529	22	37,354	87,737	3,741	LARD.		
19,345	3,258	2,522	26	4,562	29	16		4,459	44,554	LARD.		
17,878	16,758	4,226	7	3,350		2,645		3,538	34,785	LARD.		
25,506	36,534	2,196	24	283	325	55	406	29,285	29,345	LARD.		
21,604	58,201	12,650	260	3,283	2,335	345		12,131	12,078	LARD.		
48,446	46,569	1,661	42	1,641		30	60,306	25,654	25,658	LARD.		
13,251	34,391	15,436	373	3,487	1,514	30		3,455	25,306	LARD.		
5,000	4,795	540	15	4,519				3,555	43,542	LARD.		
15,194	89,990	30,244	309	1,439	493	89		14,195	8,708	LARD.		
25,574	31,494	1,474	44	3,046	1,072	69	11,424	4,883	2,868	LARD.		
11,346	10,674	5,502	114	3,384	10			2,448	15,032	LARD.		
									25,296	LARD.		
35,569	42,755	1,443	69	3,346	28	5	474	1,296	36,446	LARD.		
24,171	51,195	5,402	58	1,454	305	219	5,763	21,307	10,075	LARD.		
15,189	10,026	3,146	51	2,172	14	1,779		2,087	20,087	LARD.		
26,832	166,295	14,393	394	3,446	67	773		37,446	24,025	LARD.		
12,684	25,422	7,204	177	4,682	49	1,555		5,290	47,354	LARD.		
9,073	33,768	7,164	125	2,882	50	12		13,289	44,891	LARD.		
4,208	15,750	5,118	226	147	42	56		4,239	27,168	LARD.		
13,071	50,025	16,807	647	5,361	40	32		12,984	54,499	LARD.		
9,730	9,730	3,467	731	3,996	40	30		2,994	55,512	LARD.		
28,408	126,274	29,427	646	5,185	694	84		25,578	5,867	LARD.		
34,536	27,854	1,499	49	898	99	10	18,733	26,377	5,580	LARD.		
42,309	14,519	4,403	473	5,485	3,260	994	45,789	30,446	2,545	LARD.		
16,135	10,026	3,094	72	2,293	72	79	570	6,559	21,512	LARD.		
37,574	79,349	309	49	4,485	152	135	21,437	89,249	30,549	LARD.		
15,737	6,498	3,574		205		259		643	5,462	LARD.		
15,137	69,887	15,489	311	3,672	265	355		14,511	27,449	LARD.		
6,480	15,875	2,212	55	1,451	24	1,362		5,476	18,483	LARD.		
6,481	6,771	2,734	33	865	36	64		4,233	18,795	LARD.		
52,779	51,849	12,842	65	1,629	69	458		10,451	20,871	LARD.		
8,780	14,519	4,341	254	946	37	46		5,714	27,792	LARD.		
11,656	12,649	3,627	5	3,354	21	796		2,589	35,613	LARD.		
13,655	35,210	22,195	144	4,836	42	341		24,710	27,457	LARD.		
5,474	6,187	2,664	63	1,599	36	64		1,837	18,022	LARD.		
19,564	49,585	5,374	748	3,404	46	68		15,285	18,595	LARD.		
17,139	37,480	14,444	294	4,241	467	654	159	4,681	11,251	LARD.		
5,365	5,725	4,517	78	1,850	734	965		1,980	6,454	LARD.		
36,619	30,464	3,479	77	6,292	40		59	4,171	43,806	LARD.		
48,779	140,675	3,469	128	5,725	265		178,554	10,055	14,418	LARD.		
19,509	33,781	1,547	26	2,487	36		38,266	4,623	18,817	LARD.		
15,469	3,719	9,803		2,244				1,931	31,260	LARD.		
58,907	11,509	3,336	69	2,182	10	77		7,232	15,960	LARD.		
5,352	25,219	4,264	93	2,683	86			12,295	7,490	LARD.		
19,067	54,941	7,891	260	7,623	34			12,867	34,568	LARD.		
16,471	33,764	7,235	136	9,760	3	46		4,556	71,357	LARD.		
22,628	5,122	673	25	3,788	39	174		4,554	15,942	LARD.		
22,446	26,293	14,599	777	7,035	19	79	50	3,648	36,414	LARD.		
5,679	26,236	8,606	546	692	32	430		7,774	26,417	LARD.		
35,506	44,772	5,434	6	3,477	30	3,985		7,204	24,204	LARD.		
16,641	11,564	7,646	174	1,695	7	736		3,719	29,616	LARD.		
16,617	36,146	11,611	591	5,599	160	2,630		14,419	36,605	LARD.		
10,413	48,596	5,185	475	3,723	35	29		18,999	18,297	LARD.		
13,996	44,698	30,729	255	2,612	40	35		13,711	2,806	LARD.		
24,472	11,140	4,776	30	3,719	47	40		1,429	18,228	LARD.		
17,642	36,866	20,589	385	3,265	21			29,513	12,111	LARD.		
9,504	32,215	14,614	351	1,721	244	10		5,907	2,852	LARD.		
2,942,283	3,162,696	1,069,575	25,083	496,033	36,456	69,665	1,879,867	1,527,549	2,742,004	TOTAL.		

TABLE 2.—SHOWING THE NUMBER OF HOLDINGS RICHES IN ACRE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1889 TO 1893, BY COUNTIES AND PROVINCES—continued.

COUNTIES.	Year.	No. of Holdings exceeding 1 acre.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1889 TO 1893														Total Statute Acres.
			CEREALS, GRASSES, AND FEEDS.										Other Crops.				
			Wheat.	Oats.	Barley.	Maize.	Grass.	Hay.	Straw.	Other.	Total.	Orchards.	Plantations.	Other.	Total.		
DESIGN.	1889	4,132	4,285	14,344	2,326	3	114	162	23,313	8,386	2,698	548	3,577	11,574	40,430	32,738	
	1890	5,002	4,218	17,096	1,861	5	144	162	23,926	8,205	2,455	548	3,608	14,696	43,595	70,791	
	1891	5,498	4,258	18,811	2,050	1	129	118	24,474	8,625	2,215	1,000	3,729	14,876	41,905	72,496	
	1892	5,273	5,261	18,561	1,860	6	180	148	27,801	7,981	2,000	1,000	3,746	15,745	44,465	74,000	
	1893	5,548	5,340	13,437	1,840	3	125	127	17,448	7,560	2,331	1,000	3,738	13,499	45,250	72,506	
	1894	5,629	5,914	10,939	1,915	5	85	87	17,806	7,506	2,480	967	5,030	14,439	45,703	70,624	
	1895	5,860	5,892	17,735	2,476	6	41	49	13,894	7,436	2,492	891	5,038	12,035	44,533	74,602	
	1896	5,961	5,549	11,200	2,461	1	180	50	16,311	7,011	2,265	335	5,048	10,660	44,435	75,411	
	1897	6,864	5,552	11,491	1,980	3	115	78	16,563	6,985	2,694	341	5,068	10,709	45,714	73,601	
	1898	6,964	5,589	16,735	1,939	3	81	78	18,117	6,941	2,546	337	5,061	17,741	44,562	76,275	
FERRISBURGH.	1889	12,770	550	10,000	30	52	407	40	21,137	11,770	2,000	771	593	30,742	2,743	64,000	
	1890	12,770	551	10,000	27	52	407	40	20,913	11,766	2,220	774	594	31,055	2,743	65,000	
	1891	12,770	672	10,000	29	52	407	40	20,940	11,801	2,081	774	594	31,081	1,455	65,000	
	1892	12,770	672	10,000	29	52	407	40	20,940	11,801	2,081	774	594	31,081	1,455	65,000	
	1893	12,770	687	10,000	29	52	407	40	20,940	11,801	2,081	774	594	31,081	1,455	65,000	
	1894	12,770	771	10,458	5	12	733	4	26,387	14,658	3,131	771	1,022	10,025	1,534	64,079	
	1895	12,770	771	10,458	5	12	733	4	26,387	14,658	3,131	771	1,022	10,025	1,534	64,079	
	1896	12,770	771	10,458	5	12	733	4	26,387	14,658	3,131	771	1,022	10,025	1,534	64,079	
	1897	12,770	771	10,458	5	12	733	4	26,387	14,658	3,131	771	1,022	10,025	1,534	64,079	
	1898	12,770	771	10,458	5	12	733	4	26,387	14,658	3,131	771	1,022	10,025	1,534	64,079	
GALWAY.	1889	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1890	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1891	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1892	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1893	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1894	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1895	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1896	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1897	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
	1898	33,362	5,005	43,953	5,078	47	1,707	111	46,448	43,721	72,485	2,38	5,028	64,181	4	109,690	
KERRY.	1889	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1890	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1891	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1892	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1893	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1894	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1895	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1896	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1897	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
	1898	30,133	2,137	24,484	2,048	50	608	14	29,213	20,172	2,000	1,075	2,508	49,882	10	100,000	
KILKENNY.	1889	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1890	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1891	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1892	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1893	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1894	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1895	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1896	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1897	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
	1898	7,216	5,005	21,885	13,434	28	380	9	37,718	4,778	11,224	1,516	1,063	59,703	38,335	117,478	
LIMERICK.	1889	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1890	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1891	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1892	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1893	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1894	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1895	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1896	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1897	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1898	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
MOUNT.	1889	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1890	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1891	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1892	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1893	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1894	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1895	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1896	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1897	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
	1898	10,138	6,318	11,608	17,748	1	1	1	35,796	16,886	8,424	1,571	2,426	59,335	3	102,393	
WATERFORD.	1889	12,770	70	11,850	5	4	250	1	40,209	16,804	1,828	224	1,621	16,804	22	46,444	
	1890	12,770	70	11,850	5	4	250	1	40,209	16,804	1,828	224	1,621	16,804	22	46,444	
	1891	12,770	70	11,850	5	4	250	1	40,209	16,804	1,828</						

TABLE 9.—SHOWING THE NUMBER OF HOLDINGS EXCEEDING ONE ACRE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1880 TO 1888, BY COUNTIES AND PROVINCES—continued.

COUNTIES.	Year.	No. of Holdings exceeding 1 Acre.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1888										OTHER CROPS										Total Extent under Crops.
			CEREALS, GRASSES, AND FRUGS										OTHER CROPS										
			Wheat.	Oats.	Barley.	Rye.	Maize.	Grass.	Hay.	Straw.	Other.	Total.	Peas.	Beans.	Turneps.	Other.	Other.	Other.	Other.	Other.	Other.		
LANCASHIRE.	1880	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1881	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1882	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1883	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1884	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1885	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1886	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1887	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	1888	18,360	4,100	20,110	267	13,150	10	25,200	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	7,500	60,000	20,800	4,500	120,700
	Area, 180,000 Acres.																						
SALFORD.	1880	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1881	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1882	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1883	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1884	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1885	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1886	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1887	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	1888	14,820	794	10,000	266	3,402	4	22,138	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	680	30,000	10,902	3,100	60,000
	Area, 40,000 Acres.																						
TOTTENHAM.	1880	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1881	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1882	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1883	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1884	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1885	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1886	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1887	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	1888	21,400	5,000	42,700	400	40	64	31,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	4,000	60,000	10,000	3,000	120,000
	Area, 1,040,000 Acres.																						
TRAFALGAR.	1880	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1881	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1882	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1883	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1884	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1885	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1886	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1887	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	1888	20,000	1,000	10,000	50	5	20	20,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	4,000	30,000	10,000	3,000	120,000
	Area, 710,000 Acres.																						
WATERFORD.	1880	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1881	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1882	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1883	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1884	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1885	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1886	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1887	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1888	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	Area, 400,000 Acres.																						
WILTSHIRE.	1880	10,000	1,000	10,000	50	5	20	10,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	4,000	20,000	10,000	3,000	120,000
	1881	10,000	1																				

TABLE 2.—SHOWING THE NUMBER OF HOLDINGS EXCEEDING ONE ACRE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1880 TO 1938, BY COUNTIES AND PROVINCES—continued.

PROVINCES.

PROVINCES.	Year.	No. of Holdings exceeding 1 Acre.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1938.														Total Extent under Crops.	
			CEREALS, GRASSES, AND PASTURE.							OTHER CROPS.								
			Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Grasses.	Pasture.	Timothy.	Other Grasses.	Other Cereals.	Other Grasses.	Other Cereals.	Other Grasses.			
LEINSTER.	1880	100,510	24,598	51,547	132,127	128	1,816	1,420	648,962	150,850	68,089	14,101	13,707	254,822	842,641	700	1,307,629	
	1884	104,550	26,677	52,780	135,170	141	1,826	1,463	686,752	151,814	64,799	14,434	13,761	256,748	850,608	800	1,311,486	
	1888	104,811	28,077	52,780	135,170	86	1,822	1,446	678,819	141,482	58,721	14,416	13,768	256,721	841,260	840	1,311,486	
	1892	104,801	27,178	50,550	135,170	86	1,822	1,417	678,819	141,482	58,721	14,416	13,768	256,721	841,260	840	1,311,486	
	1896	104,801	24,457	50,550	117,809	61	1,664	1,155	623,366	138,799	58,548	13,336	13,715	252,265	847,636	830	1,290,880	
	1900	104,901	13,266	50,126	112,913	61	1,664	1,234	632,189	128,969	63,084	13,261	13,686	259,078	850,634	830	1,291,664	
	1904	104,790	10,547	50,635	118,246	48	1,606	1,237	635,949	129,078	61,798	13,171	13,234	253,445	851,608	830	1,291,664	
	1908	104,809	9,534	57,631	118,918	300	1,535	1,270	661,109	131,711	58,174	13,444	13,268	256,369	864,660	830	1,291,664	
	1912	104,800	12,228	56,690	119,748	40	1,711	1,481	683,777	128,963	57,001	13,843	13,470	253,575	871,601	820	1,292,000	
	1938	104,130	14,900	57,120	111,941	30	1,908	1,307	694,727	137,004	56,146	14,000	13,714	261,308	881,110	810	1,292,000	
MUNSTER.	1880	110,650	32,705	72,671	47,183	698,807	99	361,334	100,700	70,975	18,846	27,081	297,580	1,164,611	800	1,246,475		
	1884	110,650	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1888	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1892	110,650	34,914	70,574	44,005	1,566,323	715	286,063	162,961	73,966	20,575	31,799	308,981	1,190,800	1,000	1,250,700		
	1896	111,247	37,807	70,574	43,115	1,581,448	58	296,280	158,715	74,169	22,443	31,067	301,150	1,206,800	1,000	1,250,700		
	1900	111,619	46,807	73,471	41,790	1,480,304	32	291,487	156,060	70,469	24,259	36,801	370,713	1,216,500	1,000	1,250,700		
	1904	111,244	40,808	70,682	43,292	1,501,910	27	283,144	153,085	70,616	24,759	36,801	370,713	1,216,500	1,000	1,250,700		
	1908	111,140	11,207	71,936	45,263	1,480,609	40	295,904	150,676	71,476	24,008	35,411	377,603	1,216,500	1,000	1,250,700		
	1912	111,514	16,763	70,521	43,457	1,572,512	27	292,512	147,007	70,481	26,761	34,111	377,603	1,216,500	1,000	1,250,700		
	1938	111,679	14,341	71,404	50,686	1,501,910	27	292,512	147,007	70,481	26,761	34,111	377,603	1,216,500	1,000	1,250,700		
ULSTER.	1880	100,510	22,051	50,646	5,290	131,302	2,035	401,109	300,919	100,700	8,492	24,336	333,028	1,124,608	600	1,270,608		
	1884	103,593	25,065	50,126	4,842	141,244	2,080	406,400	302,908	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1888	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1892	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1896	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1900	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1904	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1908	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1912	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
	1938	100,510	25,065	50,646	4,842	141,244	2,035	401,109	300,919	98,035	8,748	24,908	333,275	1,124,608	600	1,270,608		
CONNAUGHT.	1880	115,772	9,285	149,754	3,681	147,630	173	172,808	152,531	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1884	115,772	9,285	149,754	3,681	147,630	173	172,808	152,531	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1888	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1892	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1896	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1900	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1904	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1908	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1912	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1938	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
MUNSTER.	1880	110,650	32,705	72,671	47,183	698,807	99	361,334	100,700	70,975	18,846	27,081	297,580	1,164,611	800	1,246,475		
	1884	110,650	32,705	72,671	47,183	698,807	99	361,334	100,700	70,975	18,846	27,081	297,580	1,164,611	800	1,246,475		
	1888	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1892	110,650	34,914	70,574	44,005	1,566,323	715	286,063	162,961	73,966	20,575	31,799	308,981	1,190,800	1,000	1,250,700		
	1896	111,247	37,807	70,574	43,115	1,581,448	58	296,280	158,715	74,169	22,443	31,067	301,150	1,206,800	1,000	1,250,700		
	1900	111,619	46,807	73,471	41,790	1,480,304	32	291,487	156,060	70,469	24,259	36,801	370,713	1,216,500	1,000	1,250,700		
	1904	111,244	40,808	70,682	43,292	1,501,910	27	283,144	153,085	70,616	24,759	36,801	370,713	1,216,500	1,000	1,250,700		
	1908	111,140	11,207	71,936	45,263	1,480,609	40	295,904	150,676	71,476	24,008	35,411	377,603	1,216,500	1,000	1,250,700		
	1912	111,514	16,763	70,521	43,457	1,572,512	27	292,512	147,007	70,481	26,761	34,111	377,603	1,216,500	1,000	1,250,700		
	1938	111,679	14,341	71,404	50,686	1,501,910	27	292,512	147,007	70,481	26,761	34,111	377,603	1,216,500	1,000	1,250,700		
CONNAUGHT.	1880	115,772	9,285	149,754	3,681	147,630	173	172,808	152,531	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1884	115,772	9,285	149,754	3,681	147,630	173	172,808	152,531	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1888	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1892	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1896	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1900	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1904	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1908	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1912	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		
	1938	116,435	7,267	157,717	4,737	159,710	134	165,367	149,416	28,495	4,475	16,307	300,330	700,000	800	875,435		

TOTAL OF IRELAND.

PROVINCES.	Year.	No. of Holdings exceeding 1 Acre.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1938.														TOTAL EXTENT UNDER CROPS.	
			CEREALS, GRASSES, AND PASTURE.							OTHER CROPS.								
			Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Grasses.	Pasture.	Timothy.	Other Grasses.	Other Cereals.	Other Grasses.	Other Cereals.	Other Grasses.	Other Cereals.		
TOTAL OF IRELAND. Area, 29,519,744 Acres.	1880	110,645	32,705	72,671	47,183	698,807	99	361,334	100,700	70,975	18,846	27,081	297,580	1,164,611	800	1,246,475		
	1884	110,654	32,743	72,642	47,183	698,807	99	361,334	100,700	70,975	18,846	27,081	297,580	1,164,611	800	1,246,475		
	1888	111,212	36,379	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1892	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1896	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1900	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1904	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1908	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1912	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		
	1938	111,247	36,336	71,854	44,800	692,646	715	286,063	179,361	72,699	18,854	28,946	307,120	1,190,800	1,000	1,250,700		

TABLE 10.—SHOWING, BY COUNTRIES AND PROVINCES, THE AVERAGE RATES OF PRODUCE OF CROPS TO THE STATUTE ACRE, IN EACH YEAR, FROM 1892 TO 1898.

COUNTRY.	Year.	Wheat.	Oats.	Barley.	Rye.	Spelt.	Maize.	Yams.	Peas.	Beans.	Turnips.	Swedes.	Carrots.	Flax.	Hay.
		Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.	Quar.
ANTWERP.	1892	12.1	12.2	17.9	14.0	14.3	10.7	14.8	3.0	12.6	13.6	8.7	22.7	2.4	
	1893	12.6	12.1	17.9	13.4	14.7	10.7	13.9	3.4	14.0	13.7	7.0	28.9	2.4	
	1894	12.6	12.3	18.4	14.0	13.7	10.7	13.4	4.0	14.0	13.6	10.7	31.6	2.4	
	1895	12.7	12.7	18.7	14.0	13.5	10.7	13.0	3.6	12.0	14.1	9.5	25.3	2.2	
	1896	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1897	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1898	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1899	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1900	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1901	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
BRUSSELS.	1892	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1893	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1894	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1895	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1896	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1897	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1898	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1899	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1900	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1901	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
LONDON.	1892	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1893	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1894	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1895	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1896	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1897	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1898	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1899	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1900	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1901	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
GLASGOW.	1892	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1893	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1894	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1895	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1896	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1897	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1898	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1899	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1900	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1901	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
DUBLIN.	1892	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1893	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1894	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1895	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1896	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1897	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1898	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1899	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1900	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	
	1901	12.6	12.6	18.6	14.0	13.5	10.7	13.0	4.8	12.6	14.9	13.4	29.9	2.2	

TABLE 10.—SHOWING THE AVERAGE RATES OF PRODUCE TO THE STATUTE ACRE—continued.

COUNTRY.	Year.	Wheat.	Oats.	Barley.	Maize.	Peas.	Beans.	Turnips.	Hay.	Straw.	Manure.	Other.	Notes.
DUBLIN.	1880	23.0	20.0	21.0	11.0	8.7	20.0	16.0	4.7	12.0	15.0	21.0	2.1
	1881	22.0	20.0	20.0	11.0	8.1	20.0	16.0	4.1	12.0	15.0	20.0	2.0
	1882	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1883	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1884	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1885	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1886	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1887	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1888	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
	1889	22.0	20.0	20.0	11.0	8.0	20.0	16.0	4.0	12.0	15.0	20.0	2.0
FENRIDGE.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
GALWAY.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
KERRY.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
KILBRIDE.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
KILKEEL.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
KILPATRICK.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
KILPATRICK.	1880	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1881	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1882	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1883	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1884	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1885	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1886	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1887	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1888	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0
	1889	14.0	12.0	13.0	5.5	3.0	12.0	9.7	3.1	10.7	14.7	6.3	2.0

TABLE 10.—SHOWING THE AVERAGE RATES OF PRODUCE TO THE STATUTE ACRES—continued

[illegible]

TABLE 10.—SHOWING THE AVERAGE RATES OF PRODUCE TO THE STATISTE ACHER—continued

[illegible]

TABLE 16.—SHOWING THE AVERAGE RATES OF PRODUCE TO THE STATUTE ACRE—continued.

AVERAGE OF PROVINCES.

PROVINCE.	Wheat.	Wheat.	Oats.	Barley.	Maize.	Peas.	Beans.	Potatoes.	Turneps.	Swedes and Turneps.	Salads.	Flax.	Hay.
	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
LEINSTER.	1200	17.0	10.4	17.0	12.4	19.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8
1898	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1899	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1900	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1901	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1902	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1903	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1904	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1905	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1906	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1907	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1908	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1909	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
1910	18.4	10.6	10.6	14.7	14.8	25.4	14.8	14.8	14.8	14.8	14.8	14.8	14.8
MUNSTER.	1200	16.1	10.8	17.6	13.2	11.8	10.1	12.0	12.0	12.0	12.0	12.0	12.0
1898	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1899	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1900	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1901	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1902	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1903	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1904	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1905	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1906	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1907	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1908	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1909	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
1910	15.9	14.7	10.8	13.2	10.7	13.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
CONNUGHT.	1200	14.6	13.0	14.0	12.1	11.7	10.4	11.8	11.8	11.8	11.8	11.8	11.8
1898	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1899	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1900	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1901	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1902	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1903	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1904	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1905	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1906	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1907	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1908	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1909	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
1910	10.9	14.1	10.9	12.0	9.9	23.4	17.4	20.0	14.4	13.4	13.4	13.4	13.4
ULSTER.	1200	15.3	14.3	14.0	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1898	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1899	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1900	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1901	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1902	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1903	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1904	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1905	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1906	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1907	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1908	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1909	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1910	12.7	14.0	14.3	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3

AVERAGE OF IRELAND.

	Wheat.	Wheat.	Oats.	Barley.	Maize.	Peas.	Beans.	Potatoes.	Turneps.	Swedes and Turneps.	Salads.	Flax.	Hay.
	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
1898	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1899	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1900	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1901	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1902	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1903	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1904	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1905	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1906	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1907	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1908	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1909	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
1910	10.9	14.0	12.5	12.9	12.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3

[illegible]

TABLE 12.—*Increasing van Nomen or Stockholders and the Quantity of Live Stock in each Town Law Union of Ireland, in 1818—continued.*

[illegible]

TABLE 13.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1859 TO 1898, BY COUNTIES AND PROVINCES.

COUNTY.	Year.	No. of Farms.			Horses and Asses.		No. of Cattle.			No. of Sheep.		No. of Pigs.		No. of Owners.	No. of Farms.
		Total farms and pastures.	Owner occupied farms.	Other occupied farms.	No. of horses.	No. of asses.	Owner occupied farms.	Other occupied farms.	Other pasture farms.	Owner occupied farms.	Other occupied farms.	Owner occupied farms.	Other occupied farms.		
Aron. 713,204 Acres.	1888	76,781	2,331	1,532	225	562	79,280	21,428	37,669	55,314	37,776	5,132	32,558	5,491	336,805
	1890	77,400	2,336	1,580	157	584	79,754	21,732	40,687	55,854	38,170	5,276	33,071	5,412	340,250
	1891	78,293	2,368	1,607	164	578	81,778	22,138	41,779	57,559	38,604	5,269	33,585	5,399	343,684
	1892	78,757	2,398	1,674	164	584	82,661	22,544	42,880	58,060	39,018	5,362	34,099	5,347	347,118
	1893	79,221	2,428	1,701	167	592	83,545	22,950	43,981	58,561	39,424	5,455	34,613	5,302	350,552
	1894	79,685	2,458	1,728	167	602	84,429	23,356	45,082	59,062	39,831	5,548	35,127	5,254	353,986
	1895	80,149	2,488	1,755	169	607	85,313	23,762	46,183	59,563	40,237	5,641	35,641	5,206	357,420
	1896	80,613	2,518	1,782	171	614	86,197	24,168	47,284	60,064	40,643	5,734	36,155	5,158	360,854
	1897	81,077	2,548	1,809	173	620	87,081	24,574	48,385	60,565	41,049	5,827	36,669	5,110	364,288
	1898	81,541	2,578	1,836	175	626	87,965	24,980	49,486	61,066	41,455	5,920	37,183	5,062	367,722
ARMON. 313,336 Acres.	1888	10,001	802	802	215	2,425	30,706	30,636	19,589	7,002	7,041	3,519	26,993	3,169	430,775
	1890	10,111	812	812	218	2,447	31,065	30,991	19,941	7,017	7,056	3,530	27,345	3,181	434,209
	1891	10,221	822	822	220	2,469	31,424	31,354	20,293	7,032	7,071	3,541	27,697	3,193	437,643
	1892	10,331	832	832	223	2,491	31,783	31,713	20,645	7,047	7,086	3,552	28,049	3,205	441,077
	1893	10,441	842	842	225	2,513	32,142	32,072	20,997	7,062	7,101	3,563	28,401	3,217	444,511
	1894	10,551	852	852	228	2,535	32,501	32,431	21,349	7,077	7,146	3,574	28,753	3,229	447,945
	1895	10,661	862	862	230	2,557	32,860	32,790	21,701	7,092	7,131	3,585	29,105	3,241	451,379
	1896	10,771	872	872	233	2,579	33,219	33,149	22,053	7,107	7,146	3,596	29,457	3,253	454,813
	1897	10,881	882	882	235	2,601	33,578	33,508	22,405	7,122	7,161	3,607	29,809	3,265	458,247
	1898	10,991	892	892	238	2,623	33,937	33,867	22,757	7,137	7,176	3,618	30,161	3,277	461,681
CARROLL. 251,255 Acres.	1888	9,832	1,408	1,369	265	2,379	28,117	19,473	8,464	41,580	35,369	2,231	30,513	3,378	199,605
	1890	9,942	1,418	1,379	267	2,397	28,476	19,772	8,600	41,889	35,668	2,242	30,812	3,389	203,039
	1891	10,052	1,428	1,389	269	2,415	28,775	19,971	8,736	42,188	35,967	2,253	31,111	3,400	206,473
	1892	10,162	1,438	1,399	271	2,433	29,074	20,170	8,872	42,487	36,266	2,264	31,412	3,411	209,907
	1893	10,272	1,448	1,409	273	2,451	29,373	20,369	9,008	42,786	36,565	2,275	31,713	3,422	213,341
	1894	10,382	1,458	1,419	275	2,469	29,672	20,568	9,144	43,085	36,864	2,286	32,014	3,433	216,775
	1895	10,492	1,468	1,429	277	2,487	29,971	20,767	9,280	43,384	37,163	2,297	32,315	3,444	220,209
	1896	10,602	1,478	1,439	279	2,505	30,270	20,966	9,416	43,683	37,462	2,308	32,616	3,455	223,643
	1897	10,712	1,488	1,449	281	2,523	30,569	21,165	9,552	43,982	37,761	2,319	32,917	3,466	227,077
	1898	10,822	1,498	1,459	283	2,541	30,868	21,364	9,688	44,281	38,060	2,330	33,218	3,477	230,511
CLARK. 768,265 Acres.	1888	12,514	3,123	2,344	763	19,981	36,331	27,476	42,475	73,868	52,927	6,326	45,608	7,281	431,099
	1890	12,574	3,133	2,354	765	20,001	36,391	27,496	42,495	73,928	52,947	6,346	45,628	7,301	433,119
	1891	12,634	3,143	2,364	767	20,021	36,451	27,516	42,515	74,000	53,007	6,366	45,648	7,321	435,139
	1892	12,694	3,153	2,374	769	20,041	36,511	27,536	42,535	74,060	53,027	6,386	45,668	7,341	437,159
	1893	12,754	3,163	2,384	771	20,061	36,571	27,556	42,555	74,120	53,047	6,406	45,688	7,361	439,179
	1894	12,814	3,173	2,394	773	20,081	36,631	27,576	42,575	74,180	53,067	6,426	45,708	7,381	441,199
	1895	12,874	3,183	2,404	775	20,101	36,691	27,596	42,595	74,240	53,087	6,446	45,728	7,401	443,219
	1896	12,934	3,193	2,414	777	20,121	36,751	27,616	42,615	74,300	53,107	6,466	45,748	7,421	445,239
	1897	12,994	3,203	2,424	779	20,141	36,811	27,636	42,635	74,360	53,127	6,486	45,768	7,441	447,259
	1898	13,054	3,213	2,434	781	20,161	36,871	27,656	42,655	74,420	53,147	6,506	45,788	7,461	449,279
CLARK. 1,534,701 Acres.	1888	37,716	7,848	7,884	2,486	75,488	99,288	64,880	186,465	193,382	138,811	25,381	142,308	25,341	1,212,000
	1890	37,776	7,858	7,894	2,488	75,508	99,348	64,900	186,485	193,442	138,831	25,401	142,328	25,401	1,214,020
	1891	37,836	7,868	7,904	2,490	75,528	99,408	64,920	186,510	193,502	138,851	25,461	142,348	25,461	1,216,040
	1892	37,896	7,878	7,914	2,492	75,548	99,468	64,940	186,535	193,562	138,871	25,521	142,368	25,521	1,218,060
	1893	37,956	7,888	7,924	2,494	75,568	99,528	64,960	186,560	193,622	138,891	25,581	142,388	25,581	1,220,080
	1894	38,016	7,898	7,934	2,496	75,588	99,588	64,980	186,585	193,682	138,911	25,641	142,408	25,641	1,222,100
	1895	38,076	7,908	7,944	2,498	75,608	99,648	65,000	186,610	193,742	138,931	25,701	142,428	25,701	1,224,120
	1896	38,136	7,918	7,954	2,500	75,628	99,708	65,020	186,635	193,802	138,951	25,761	142,448	25,761	1,226,140
	1897	38,196	7,928	7,964	2,502	75,648	99,768	65,040	186,660	193,862	138,971	25,821	142,468	25,821	1,228,160
	1898	38,256	7,938	7,974	2,504	75,668	99,828	65,060	186,685	193,922	138,991	25,881	142,488	25,881	1,230,180
CLARK. 1,534,701 Acres.	1888	37,716	7,848	7,884	2,486	75,488	99,288	64,880	186,465	193,382	138,811	25,381	142,308	25,341	1,212,000
	1890	37,776	7,858	7,894	2,488	75,508	99,348	64,900	186,485	193,442	138,831	25,401	142,328	25,401	1,214,020
	1891	37,836	7,868	7,904	2,490	75,528	99,408	64,920	186,510	193,502	138,851	25,461	142,348	25,461	1,216,040
	1892	37,896	7,878	7,914	2,492	75,548	99,468	64,940	186,535	193,562	138,871	25,521	142,368	25,521	1,218,060
	1893	37,956	7,888	7,924	2,494	75,568	99,528	64,960	186,560	193,622	138,891	25,581	142,388	25,581	1,220,080
	1894	38,016	7,898	7,934	2,496	75,588	99,588	64,980	186,585	193,682	138,911	25,641	142,408	25,641	1,222,100
	1895	38,076	7,908	7,944	2,498	75,608	99,648	65,000	186,610	193,742	138,931	25,701	142,428	25,701	1,224,120
	1896	38,136	7,918	7,954	2,500	75,628	99,708	65,020	186,635	193,802	138,951	25,761	142,448	25,761	1,226,140
	1897	38,196	7,928	7,964	2,502	75,648	99,768	65,040	186,660	193,862	138,971	25,821	142,468	25,821	1,228,160
	1898	38,256	7,938	7,974	2,504	75,668	99,828	65,060	186,685	193,922	138,991	25,881	142,488	25,881	1,230,180
DANVERS. 611,307 Acres.	1888	37,476	2,462	1,561	148	2,208	68,421	20,381	35,494	41,729	30,390	6,330	40,885	12,551	673,522
	1890	37,536	2,472	1,571	149	2,209	68,481	20,391	35,504	41,739	30,400	6,340	40,895	12,561	675,542
	1891	37,596	2,482	1,581	150	2,210	68,541	20,401	35,514	41,749	30,410	6,350	40,905	12,571	677,562
	1892	37,656	2,492	1,591	151	2,211	68,601	20,411	35,524	41,759	30,420	6,360	40,915	12,581	679,582
	1893	37,716	2,502	1,601	152	2,212	68,661	20,421	35,534	41,769	30,430	6,370	40,925	12,591	681,602
	1894	37,776	2,512	1,611	153	2,213	68,721	20,431	35,544	41,779	30,440	6,380	40,935	12,601	683,622
	1895	37,836	2,522	1,621	154	2,214	68,781	20,441	35,554	41,789	30,450	6,390	40,945	12,611	685,642
	1896	37,896	2,532	1,631	155	2,215	68,841	20,451	35,564	41,799	30,460	6,400	40,955	12,621	687,662
	1897	37,956	2,542	1,641	156	2,216	68,901	20,461	35,574	41,809	30,470	6,410	40,965	12,631	689,682
	1898	38,016	2,552	1,651	157	2,217	68,961	20,471	35,584	41,819	30,480	6,420	40,975	12,641	691,702

TABLE 12.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1859 TO 1898, BY COUNTRY AND PROVINCE—continued.

COUNTRY.	Year.	No. of Horses.			Mules and Asses.		No. of Cattle.			No. of Sheep.		No. of Pigs.		No. of Goats.	No. of Poultry.
		Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.	Year previous to 1859.		
Dorset.	1859	18,454	1,207	751	342	1,596	43,410	38,040	7,281	24,417	10,561	1,428	9,348	5,400	241,816
	1860	18,480	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1861	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1862	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1863	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1864	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1865	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1866	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1867	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1868	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
Devonshire.	1859	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1860	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1861	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1862	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1863	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1864	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1865	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1866	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1867	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
	1868	6,346	471	585	124	4,367	35,808	15,473	17,282	8,154	3,875	2,286	22,286	4,501	401,146
Gloucester.	1859	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1860	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1861	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1862	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1863	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1864	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1865	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1866	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1867	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1868	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
Kent.	1859	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1860	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1861	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1862	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1863	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1864	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1865	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1866	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1867	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1868	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
Lincoln.	1859	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1860	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1861	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1862	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1863	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1864	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1865	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1866	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1867	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816
	1868	18,454	1,286	870	342	1,596	43,462	38,082	7,281	24,459	10,561	1,428	9,348	5,400	241,816

TABLE 13.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1889 TO 1898, BY COUNTIES AND PROVINCES—continued.

COUNTIES.	Time.	No. of Horses.			Mean and Area.		No. of Cattle.			No. of Sheep.		No. of Pigs.		No. of Cows.	No. of Hens.
		Two years and over.	One year and under.	Under one year.	No. of Horses.	No. of Acres.	Two years and over.	One year and under.	Under one year.	Two years and over.	Under one year.	Two years and over.	Under one year.		
Lancashire.	1889	11,568	9,455	2,043	2,180	3,760	121,679	96,281	62,306	39,054	34,796	7,336	33,540	12,286	435,864
	1890	12,025	9,787	2,222	2,262	3,842	125,291	102,545	76,376	41,584	35,902	7,676	36,007	12,591	437,436
	1891	12,571	10,011	2,551	2,345	3,943	128,526	105,832	77,145	42,480	36,982	7,817	37,737	12,836	441,074
	1892	12,659	10,026	2,551	2,370	3,943	130,815	107,720	77,201	43,565	37,009	8,000	38,511	12,946	443,964
	1893	12,568	9,970	2,583	2,341	3,914	131,813	108,661	78,004	43,119	37,558	8,118	38,597	12,936	445,737
	1894	12,573	9,980	2,572	2,344	3,912	128,517	105,824	77,145	42,480	36,982	7,817	37,737	12,837	445,926
	1895	12,573	9,980	2,572	2,344	3,912	128,517	105,824	77,145	42,480	36,982	7,817	37,737	12,837	445,926
	1896	12,573	9,980	2,572	2,344	3,912	128,517	105,824	77,145	42,480	36,982	7,817	37,737	12,837	445,926
	1897	12,573	9,980	2,572	2,344	3,912	128,517	105,824	77,145	42,480	36,982	7,817	37,737	12,837	445,926
	1898	12,573	9,980	2,572	2,344	3,912	128,517	105,824	77,145	42,480	36,982	7,817	37,737	12,837	445,926
Lancashire.	1889	37,347	3,802	2,741	26	863	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1890	37,869	3,871	2,792	27	849	12,045	36,483	27,437	26,064	24,361	4,394	31,656	6,221	446,921
	1891	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1892	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1893	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1894	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1895	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1896	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1897	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
	1898	37,168	3,812	2,732	24	839	11,954	35,707	25,551	25,426	23,471	4,394	31,656	6,221	446,921
Lancashire.	1889	10,265	3,499	2,202	56	969	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1890	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1891	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1892	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1893	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1894	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1895	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1896	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1897	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1898	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
Lancashire.	1889	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1890	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1891	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1892	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1893	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1894	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1895	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1896	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1897	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1898	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
Lancashire.	1889	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1890	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1891	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1892	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1893	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1894	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1895	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1896	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1897	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
	1898	2,759	1,314	1,179	225	2,691	27,326	16,523	12,511	27,326	16,523	12,511	27,326	16,523	12,511
Lancashire.	1889	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1890	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1891	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1892	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1893	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1894	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1895	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1896	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1897	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
	1898	1,165	3,524	1,551	422	3,712	31,241	25,093	15,819	15,845	10,432	2,908	19,831	3,931	266,864
Lancashire.	1889	10,265	3,499	2,202	56	969	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1890	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1891	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1892	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1893	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1894	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1895	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1896	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1897	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
	1898	10,565	3,584	2,263	58	974	35,426	21,812	21,694	23,145	17,945	5,405	20,905	6,117	333,496
Lancashire.	1889	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1890	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1891	4,355	1,441	1,276	506	3,183	29,313	14,358	12,751	16,847	11,676	2,212	17,846	1,259	226,367
	1892	4,355	1,441	1											

TABLE 13.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1889 TO 1893, BY COUNTIES AND PROVINCES—continued.

PROVINCES.

PROVINCES.	Year.	No. of HORSES.				Mares and Amos.		No. of CATTLE.			No. of SHEEP.		No. of PIGS.		No. of GOATS.	No. of POULTRY.
		Previous year and upwards.	One year old and under two years.	Under one year.	Under one year.	No. of Males.	No. of Amos.	Previous year and upwards.	One year old and under two years.	Under one year.	Previous year and upwards.	Under one year.	One year old and under two years.	Under one year.		
LEINSTER.	1889	125,261	28,648	11,556	8,572	45,816	693,665	224,748	167,274	175,664	471,141	26,374	962,193	78,296	3,994,413	
	1890	127,701	29,558	12,000	8,552	45,837	693,692	247,553	167,185	180,916	481,377	27,117	961,175	78,479	3,706,856	
	1891	128,948	30,811	12,545	8,507	45,855	648,299	247,173	168,580	182,550	482,727	28,249	961,405	82,306	3,696,790	
	1892	130,448	31,489	12,960	8,508	45,856	671,480	241,152	170,762	186,762	488,118	29,962	961,612	82,606	3,702,670	
	1893	132,326	32,755	13,594	8,507	45,857	667,378	253,531	173,884	181,668	493,561	31,001	961,661	78,593	3,960,696	
	1894	136,314	35,714	13,413	8,667	46,075	693,945	245,307	174,501	185,492	504,495	30,153	972,308	74,832	3,986,686	
MUNSTER.	1889	136,314	35,714	13,413	8,667	46,075	693,945	245,307	174,501	185,492	504,495	30,153	972,308	74,832	3,986,686	
	1890	139,132	37,111	13,796	8,667	46,075	697,500	245,304	181,706	198,706	504,203	31,011	972,308	74,832	3,986,686	
	1891	140,417	37,414	14,245	8,667	46,075	697,500	245,304	181,706	198,706	504,203	31,011	972,308	74,832	3,986,686	
	1892	141,352	37,414	14,245	8,667	46,075	697,500	245,304	181,706	198,706	504,203	31,011	972,308	74,832	3,986,686	
	1893	142,091	37,369	14,245	8,667	46,075	697,500	245,304	181,706	198,706	504,203	31,011	972,308	74,832	3,986,686	
	1894	142,091	37,369	14,245	8,667	46,075	697,500	245,304	181,706	198,706	504,203	31,011	972,308	74,832	3,986,686	
ULSTER.	1889	131,481	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1890	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1891	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1892	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1893	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1894	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
CONNAUGHT.	1889	131,481	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1890	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1891	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1892	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1893	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
	1894	131,791	27,354	11,745	8,556	45,811	677,354	235,800	167,436	185,422	525,592	28,153	975,591	65,521	4,125,363	
TOTAL OF IRELAND.	1889	445,701	104,834	40,000	34,362	163,509	2,693,065	889,658	643,394	700,776	2,486,864	125,076	6,811,091	311,279	27,662,893	
	1890	448,201	106,111	40,796	34,362	163,509	2,693,065	889,658	643,394	700,776	2,486,864	125,076	6,811,091	311,279	27,662,893	
	1891	448,201	106,111	40,796	34,362	163,509	2,693,065	889,658	643,394	700,776	2,486,864	125,076	6,811,091	311,279	27,662,893	
	1892	448,201	106,111	40,796	34,362	163,509	2,693,065	889,658	643,394	700,776	2,486,864	125,076	6,811,091	311,279	27,662,893	
	1893	448,201	106,111	40,796	34,362	163,509	2,693,065	889,658	643,394	700,776	2,486,864	125,076	6,811,091	311,279	27,662,893	
	1894	448,201	106,111	40,796	34,362	163,509	2,693,065	889,658	643,394	700,776	2,486,864	125,076	6,811,091	311,279	27,662,893	

TABLE 14.—SHOWING, by COUNTIES and PROVINCES, the Total Area under POTATOES in 1898, and the Extent in Statute Acres under each description of that crop.

COUNTIES.	Total extent under Potatoes in Statute Acres.	EXTENT IN STATUTE ACRES UNDER																
		Champion	Flounders	Irish Maris	Beauty of Hebe	Highland Black	Forster's Favorite	Abundance	Glory	Rebecca	American Wonder	More Crop	Black Sea	Gladiator	Beauty of Hebe	Topical	White Hebe	All others
ARLUND, . . .	37,414	15,344	843	7,382	1,273	2,582	4,726	2,750	271	99	26	238	11	11	11	5	1,234	
ARMAGH, . . .	22,089	15,617	1,214	305	518	1,791	1,654	656	92	343	116	121	305	14	14	14	268	
CARLOW, . . .	2,436	6,641	795	24	567	185	85	32	3	69	24	3	14	14	14	14	24	
CAYNE, . . .	22,791	19,273	2,471	330	571	8,86	35	119	26	367	27	118	118	118	118	118	77	
CLARE, . . .	18,798	12,829	2,125	204	1,318	160	1	217	1	8	20	1,003	1,003	1,003	1,003	1,003	730	
CORK, . . .	45,696	40,347	4,189	248	1,988	262	55	145	4	0	190	27	19	19	19	19	1,308	
DONEGAL, . . .	60,443	21,867	1,374	7,139	485	1,161	2,179	387	608	226	51	260	1,412	1,412	1,412	1,412	2,388	
DUBLIN, . . .	62,529	18,838	762	426	2,615	8,256	6,812	3,172	1,583	294	772	55	118	118	118	118	1,585	
DURHAM, . . .	6,941	1,244	255	140	2,323	245	246	34	14	6	585	1	64	64	64	64	220	
FERRISBURGH, . . .	15,598	9,692	1,699	585	157	645	199	219	62	65	1	3	18	18	18	18	30	
GALWAY, . . .	39,527	31,242	3,399	595	812	76	4	35	1	69	28	23	15	15	15	15	795	
KERRY, . . .	33,861	29,807	1,732	389	561	72	15	145	1	43	26	1	1	1	1	1	454	
KILDARE, . . .	6,320	4,367	795	55	592	226	82	35	24	22	196	1	18	18	18	18	56	
KILKENNY, . . .	10,677	10,092	1,212	22	471	155	22	14	18	13	27	1	3	3	3	3	68	
KING'S, . . .	15,598	16,879	1,158	42	990	156	26	26	8	122	93	12	14	14	14	14	90	
LIMERICK, . . .	13,544	11,421	1,143	48	22	442	4	89	1	256	65	9	1	1	1	1	181	
LONDONDERRY, . . .	14,471	11,424	1,026	41	606	120	29	33	1	1	1	1	1	1	1	1	181	
LONGFORD, . . .	26,644	14,910	828	6,181	451	1,218	2,615	2,082	706	132	1	1	1	1	1	1	738	
LONDONDERRY, . . .	18,629	6,290	1,028	74	211	178	19	32	1	135	1	1	1	1	1	1	62	
LOUTH AND DOWN, County of Down, . . .	3,566	6,793	362	48	798	166	169	78	136	48	32	1	1	1	1	1	75	
MONAGHAN, . . .	49,694	33,089	3,602	595	1,145	185	36	133	8	34	2	10	14	14	14	14	1,396	
MOUNT, . . .	9,246	6,719	748	14	1,167	283	37	54	59	63	48	1	76	76	76	76	109	
MOUNT, . . .	26,538	16,132	2,191	113	368	617	266	177	18	56	1	260	49	49	49	49	340	
QUINN'S, . . .	18,685	11,261	1,123	61	681	169	16	58	5	198	79	1	20	20	20	20	775	
ROSSNARE, . . .	20,673	16,421	1,312	481	581	127	43	55	1	85	16	98	46	46	46	46	237	
SLIGO, . . .	10,405	10,436	1,693	237	226	137	5	145	55	28	92	77	1	1	1	1	423	
TIPPERARY, . . .	21,619	20,265	2,648	67	585	513	48	35	50	61	3	1	1	1	1	1	129	
TYNAR, . . .	36,774	31,833	2,381	7,099	720	1,878	2,594	3,420	286	147	2	24	145	145	145	145	496	
WATERFORD, . . .	34,483	24,436	896	10	621	31	92	4	1	3	56	1	29	29	29	29	349	
WATERFORD, . . .	6,796	7,136	1,846	32	269	161	8	47	18	21	3	1	1	1	1	1	98	
WEXFORD, . . .	19,898	16,169	1,742	228	667	497	229	65	21	39	124	1	14	14	14	14	161	
WICKLOW, . . .	1,168	5,500	406	27	1,322	121	167	21	64	45	279	4	27	27	27	27	161	
PROVINCES.																		
LEINSTER, . . .	127,691	85,556	13,386	711	16,872	3,379	1,366	500	324	754	1,481	92	261	261	261	261	1,746	
MUNSTER, . . .	141,837	114,419	14,419	4,764	6,215	540	277	625	25	78	276	39	153	153	153	153	3,061	
ULSTER, . . .	286,306	146,607	18,864	28,695	7,705	19,062	31,439	8,329	4,514	1,687	3,818	1,194	1,422	1,422	1,422	1,422	7,485	
CONNAUGHT, . . .	127,273	106,138	11,692	1,547	2,485	1,633	199	493	67	430	184	102	67	67	67	67	2,660	
Total of Ireland, 1898, . . .	682,607	468,741	50,135	21,689	26,840	24,356	28,164	16,694	5,861	3,993	5,916	1,434	1,412	1,412	1,412	1,412	15,219	
Percentage in 1898, . . .	100 0	70 0	7 4	4 7	4 0	3 7	4 1	2 4	8 6	5 8	8 6	2 1	2 1	2 1	2 1	2 1	2 2	
Total of Ireland, 1897, . . .	677,216	481,673	50,442	21,687	27,167	24,356	28,164	16,694	5,861	3,993	5,916	1,434	1,412	1,412	1,412	1,412	15,219	
Percentage in 1897, . . .	100 0	72 6	7 4	4 7	4 0	3 7	4 1	2 4	8 6	5 8	8 6	2 1	2 1	2 1	2 1	2 1	2 2	

* Including 1,268 acres under "Up to Hebe," 1,000 acres under "Beauty of Hebe," and 1,000 acres under "Gladiator."

† Including 1,356 acres under "Early Maris," 1,267 acres under "Beauty of Hebe," and 1,000 acres under "Gladiator."

TABLE 16.—SHOWING, by COUNTIES, the average rate of Produce per Statute Acre of the principal descriptions of POTATOES planted in Ireland in 1898.

COUNTIES.	AVERAGE RATE OF PRODUCE PER STATUTE ACRE OF														
	Champion	Shades	Irish White	Early of Seed	Medium Season	Patent, or Ireland's Champion	Slender Heart	Irish	Argentine	Malta	Golden Wonder	Golden Wonder	Golden Wonder	Golden Wonder	White Peas.
ANTRIM, . . .	66	72	77	82	75	61	72	87	-	35	25	-	88	-	47
ARMAGH, . . .	57	73	57	108	87	69	79	94	84	95	122	-	81	-	-
CARLOW, . . .	100	78	44	58	73	74	64	-	35	88	55	-	-	-	-
Cavan, . . .	54	74	76	74	73	79	71	30	78	-	-	-	129	-	-
CLARE, . . .	63	63	88	72	58	80	43	-	-	45	-	-	-	44	-
COKE, . . .	182	78	76	196	56	87	79	165	-	89	35	-	82	-	-
DOWN, . . .	84	83	81	86	82	106	34	58	83	68	67	37	101	-	43
DUBLIN, . . .	58	83	118	100	105	111	92	134	-	107	81	-	79	-	-
DERRY, . . .	115	180	114	136	39	120	96	-	-	119	-	-	-	-	-
FERRARD, . . .	69	87	89	83	77	63	54	79	89	-	61	-	-	-	-
GALWAY, . . .	55	81	101	88	74	-	84	-	82	37	-	-	77	-	106
KERRY, . . .	56	72	66	76	61	55	181	-	-	79	-	-	-	-	80
KILMORE, . . .	68	82	63	86	77	154	90	78	100	37	-	-	-	-	-
KILPATRICK, . . .	83	87	84	85	85	83	57	85	64	78	-	-	-	-	-
KING'S, . . .	79	66	70	79	74	69	83	189	64	54	83	-	106	-	-
LEITH, . . .	82	74	63	-	75	-	66	-	56	38	61	-	-	-	-
LIMERICK, . . .	73	69	83	76	73	77	54	-	-	-	-	-	-	66	-
LONDONDERRY, . . .	36	161	87	130	94	94	88	103	76	-	94	-	163	-	-
LONGFORD, . . .	106	84	73	89	74	96	34	-	66	-	-	-	-	-	-
LOUTH and DOWN, County of Town.	116	75	84	88	88	37	62	114	60	100	-	-	-	-	-
MONAGHAN, . . .	96	81	53	97	98	106	79	-	99	-	77	-	-	-	-
MEATH, . . .	88	74	45	87	65	71	66	88	80	57	-	-	62	-	-
MONAGHAN, . . .	97	81	102	117	84	160	87	100	30	-	100	-	-	-	-
QUEEN'S, . . .	68	61	67	63	71	67	56	63	72	72	-	-	-	-	-
ROSCOMMON, . . .	103	56	82	83	102	99	33	-	82	-	84	-	89	-	-
SLIGO, . . .	118	104	111	113	101	130	83	109	79	-	-	-	-	-	62
TIPPERARY, . . .	83	79	57	79	81	60	54	-	60	74	-	-	-	-	-
TYRONE, . . .	82	77	86	98	92	98	76	84	64	85	100	-	80	-	-
WATERFORD, . . .	81	66	-	96	103	100	-	-	77	75	-	-	66	-	-
WEXFORD, . . .	83	69	78	81	79	84	73	65	88	37	-	-	-	-	-
WICK, . . .	80	73	89	71	73	73	79	85	69	73	-	-	47	-	-
WICKLOW, . . .	83	71	-	58	51	84	65	84	68	88	-	-	100	-	-

TABLE 17.—Showing, by Counties and Provinces, the Number of BOARDS

PROVINCES AND COUNTIES.	Number of BOARDS at June 30, 1898, distinguished by their									
	WATER PAST.						BLANK PAST.			
	Large Turbines.		Middle Turbines.		Small Turbines.		Turbines.		Subs.	
	Red in Ireland.	Imported.	Red in Ireland.	Imported.	Red in Ireland.	Imported.	Red in Ireland.	Imported.	Red in Ireland.	Imported.
LEINSTER.										
Carlow,	7	0	0	0	1	0	0	0	0	0
Dublin,	9	0	0	0	1	0	0	0	0	0
Kildare,	0	0	0	0	0	0	0	0	0	0
Kilkenny,	10	0	0	0	0	0	0	0	0	0
King's,	11	0	0	0	0	0	0	0	0	0
Longford,	7	0	0	0	0	0	0	0	0	0
Louth,	0	0	0	0	0	0	0	0	0	0
Mayo,	0	0	0	0	0	0	0	0	0	0
Monaghan,	0	0	0	0	0	0	0	0	0	0
Queen's,	0	0	0	0	0	0	0	0	0	0
Westmeath,	0	0	0	0	0	0	0	0	0	0
Wexford,	0	0	0	0	0	0	0	0	0	0
Wick,	0	0	0	0	0	0	0	0	0	0
Total of Leinster,	54	0	0	0	2	0	0	0	0	0
MUNSTER.										
Cork,	0	0	0	0	0	0	0	0	0	0
Cork, E. H.,	0	0	0	0	0	0	0	0	0	0
Cork, W. H.,	0	0	0	0	0	0	0	0	0	0
Kerry,	0	0	0	0	0	0	0	0	0	0
Limerick,	0	0	0	0	0	0	0	0	0	0
Liserry, N. H.,	0	0	0	0	0	0	0	0	0	0
Liserry, S. H.,	0	0	0	0	0	0	0	0	0	0
Wexford,	0	0	0	0	0	0	0	0	0	0
Total of Munster,	0	0	0	0	0	0	0	0	0	0
ULSTER.										
Armagh,	0	0	0	0	0	0	0	0	0	0
Down,	0	0	0	0	0	0	0	0	0	0
Fermanagh,	0	0	0	0	0	0	0	0	0	0
Londonderry,	0	0	0	0	0	0	0	0	0	0
Monaghan,	0	0	0	0	0	0	0	0	0	0
Tyrone,	0	0	0	0	0	0	0	0	0	0
Total of Ulster,	0	0	0	0	0	0	0	0	0	0
CONNAUGHT.										
Galway,	0	0	0	0	0	0	0	0	0	0
Sligo,	0	0	0	0	0	0	0	0	0	0
Mayo,	0	0	0	0	0	0	0	0	0	0
Donegal,	0	0	0	0	0	0	0	0	0	0
Total of Connaught,	0	0	0	0	0	0	0	0	0	0
Total of Ireland,	54	0	0	0	2	0	0	0	0	0

kept for Breeding Purposes in Ireland in the Year 1898.

Imports from other States or Countries.									TOTAL SHOWN BY BOARD.			PROVINCES AND COUNTIES.
Tons on Board at Port.			GROSS TONS.			Ditto not coming under any of foregoing headings.						
New York.		Total.										
Dead in Ireland.	Im-ported.		Total.	Dead in Ireland.	Im-ported.	Total.	Dead in Ireland.	Im-ported.					Total.	Dead in Ireland.	Im-ported.	Total.
												LEINSTER.
			7		7	7		7	80	6	86	Carlow.
			9		9	4		4	10	6	16	Dublin.
			9		9	9		9	35	2	37	Kildare.
			10		10	2		2	40	22	62	Kilkenny.
			10		10	8		8	40	3	43	Limerick.
			10		10	8		8	30	2	32	Longford.
			9		9	2		2	34		34	Louth.
			6		6				19		19	Meath.
			7		7	5		5	42	4	46	Queen's.
			1		1	9		9	18		18	Westmeath.
			10		10	9		9	70	4	74	Wexford.
			10		10	5		5	49		49	Wicklow.
			113		113	56		56	618	42	660	Total of Leinster.
												MUNSTER.
1		1	10		10	4		4	30	4	34	Clast.
1		1	47		47	24		24	100	6	106	Cork, E. H.
			50		50	5		5	77	6	83	Cork, W. H.
			50		50	10		10	60	2	62	Kerry.
	1	1	59		59	14		14	71	14	85	Limerick.
	1	1	50		50	0		0	23	4	27	Tipperary, N. H.
			27		27	0		0	42	5	47	Tipperary, S. H.
			18		18	5		5	50	2	52	Wexford.
2	2	4	213		213	64		64	850	87	937	Total of Munster.
												ULSTER.
			24		24	10		10	100	2	102	Antrim.
			7		7	1		1	30		31	Armagh.
1		1	35		35	8		8	34		36	Cavan.
1		1	31		31	2		2	40	4	44	Down.
			37		37	17		17	72	3	75	Dublin.
			3		3	2		2	37		39	Fermanagh.
			32		32	6		6	32		38	Londonderry.
			12		12	4		4	47	2	49	Monaghan.
			12		12	6		6	30		36	Tyrone.
1		1	180		180	60		60	815	16	831	Total of Ulster.
												CONNAUGHT.
			90		90	31		31	48	7	55	Galway.
			5		5	1		1	20		21	Lakeview.
			22		22	10		10	54	3	57	Mayo.
			6		6	11		11	31	3	34	Sligo.
			34		34	0		0	34	2	36	Sligo.
			77		77	32		32	100	14	114	Total of Connaught.
2	2	4	108		108	218		218	1,291	187	1,478	Total of Ireland.

APPENDIX—SILOS

The following statements have been received from persons who have made Enslage in Ireland in 1869.

PROVINCE OF

PROVINCE OF

Name and Residence.	No. of Stiles.	No. of Shanks.	Dimensions of stiles—Length, breadth, depth.	Materials at Stile.			Whether Drained or not.	Situation: Is it "below," "at level," or "above" surface?	The drainage holes made without a stile and how?
				Walls.	Floor.	Roof.			
DUBLIN COUNTY.									
Thomas Carroll, Esq., Albion Farm, Glenside.	1	"	80 feet by 2 feet, 22 feet deep.	Conglomerate.	Conglomerate.	Wood.	Drained.	Partly below.	No.
Benedict F. Egan, Esq., Glenside.	"	1	"	"	"	"	"	"	In a stack, 30 feet by 12 feet, 8 feet high, with Johnson's patent wire press.
Chas Smith, Esq., for Lord, Anderson, D.L., Marquette, Belfast.	"	2	"	"	"	"	"	"	In a stack, 20 feet by 20 feet, 3 feet high. No side walls, and no seam on top stiles. It is situated in a covered place with a foot deep of clay, exactly round on the corners.
KILKENNY COUNTY.									
Mr Wm Mitchell, for the Farmers' Associa- tion, D.L., Newborough, Kilkenny.	"	2	"	"	"	"	"	"	On Newborough we make stacks of the wastage slugs on the fields where they grow, generally in good centres for feeding cattle; some stack with straw winter.
Michael Davis, Esq., Oxmanstown, Wicklow, Dublin.	"	1	"	"	"	"	"	"	In which 16 feet long, 12 feet broad, and 14 feet high. Having across the middle with machine, and it is graded to place irregularities topped and trenched, I have had it filled some- what, thus some times, find not the way this time to be so useful as between the same quantity of stones.
KING'S COUNTY.									
Michael O'Brien, Esq., Old Croghan, Kilgobbin.	"	1	"	"	"	"	"	"	Yes, in a stack, 20 feet by 12 feet, 6 feet high. By process stack with soil.
Patrik O'Brien, Esq., Croghan, Kilgobbin.	"	1	"	"	"	"	"	"	In a stack, 20 feet by 12 feet, 3 feet high. Cubical shape, 20 ft the stack, 20 ft cubical and 20 ft ground level with the bottom and sides.
Jacobus G. Doyle, Esq., Doyle, D.L., Carlin.	2	"	30 feet by 12 feet, 14 feet deep; 40 feet by 12 feet, 14 feet deep; 60 feet by 12 feet, 12 feet deep.	Reddish concrete.	Clay.	Gauged iron.	No.	Partly below.	No.
M E Quinlan, Pro- prio, for The Royal Assn. J. C. Downwood, Mount St. Joseph Abbey, Boston.	"	1	"	"	"	"	"	"	In a stack, made in a circular shape about 12 feet in diameter, 3 feet high, partly below the surface and partly above, only surface over- lapped for water not drained. The bottom was raised was turned to a level, or large hole in the field being tramped with very fine shovels the slugs, and were up sufficiently high the horses and cattle were drawn over it.
E. Barry, Esq., J.P., Donaghadee.	2	1	(1) 40 feet by 12 feet, 14 feet deep; (2) do. (3) 22 feet by 8 feet, 12 feet deep.	Conglomerate.	Conglomerate.	Corrugated iron.	No.	Partly below.	In a stack, short in fact in diameter, 4 feet high, 1 foot 4 inches wide, straight up weighted with a few tons of hay, 3 layer of manure, and barbed between the outside and top.

AND ENSILAGE.

The names and addresses have been inserted in those cases where permission has been given to include them.

LEINSTER.

Number of days on which silage was made.	Material put in, or taken, at which.	Temperature.		Quantity of silage in the pen, given to cattle per day.	To what description of cattle, if in the same state as, and how much.	Remarks.
		Greatest heat.	Average heat for first 10 days.			
2 days.	Second crop (about 1700) green and clover.	20 degrees, F.	12 degrees, F.	About 20 lbs.	Shore cattle.	The silage made in the above silage came out for use in good condition. The cattle that were fed upon it were "satisfied". The silage was eaten by them readily, and the report upon its use may be shortly stated in a minute.
4 days.	Rough green from heath and shrubs.	127 degrees, F.	127 degrees, F.	None used yet this year.	Selected for winter and small calves.	—
About 4 weeks.	Grass from plantations of young trees and shrubs.	No account kept of this.		About 20 lbs.	1 and 2-year-old cattle, not in the same state as.	The silage made here is not made in the same way; we use the second crop of grass cut in plantations and shrubs the end of September and early October, the quality is excellent.
About 4 days.	Rough grass.	The heat or temperature 1 in our 2000 tons, having got into a thoroughly successful system.		About 20 lbs.	Two-yearling two-year-old calves generally.	The silage made here we find a very useful winter food, and last year I found one lot of calves, when put on hay for a month when calves had run out, they were back in condition. I also found yearlings yielded to thrive equally well on it, and others on turnips and hay, and this year we made thirty-eight acres of it in three weeks, simply weighted with clay.
4 days.	Grass cut at very good land.	Not measured.		Two three or regular quantity.	To make some 10-year-olds, 1-year-olds.	This time I had not the time, so, to be as careful as usual, owing to want of persons, so I had to take longer to make it and somewhat, with some exception, it is not as good as it used to be, but I have never better than any silage yet, though it is not as plentiful as before now.
4 days.	Ordinary grass.	Had no means of measuring.		40 lbs. per head.	2-year-olds.	I have found quality better for feeding purposes than hay of same land.
4 days.	Second crop (about 1700) green and clover.	No means of testing.		20 lbs.	Milk cows more or less from 2 to 1 year old, weaning calves & growing colts. But in some.	Shivery weather here. When the silage was made out the silage and silage with a hay made in the cold part of the silage, made the silage side of the work, more, and a dip in the silage, the silage was it on the same. All the silage was, several weeks of it.
10 to 12 days.	Old meadow.	Not observed.		20 to 22 lbs.	10-year-old cattle and cows.	Quality excellent and I observe that cattle only show their silage feeding in June, and come out the silage.
4 days with water.	Old meadow grass.	Not taken.		About 40 lbs. per head per day.	Milk cows, calves, and calves, and some silage of all ages.	I consider silage excellent feeding when used moderately, i.e., in the proportion of a part of silage to 4 parts of hay. I find by adopting this proportion that the stock are kept in the best condition. I don't think cattle fed entirely on silage do so well as when they get some hay along with it. Nor do I think by giving them as much as they will eat it is conducive to health.
About 4 weeks, in 1870.	Old meadow grass.	Not taken.		—	Strong afterwards with hay in cutting some small.	—

PROVINCE OF IRELAND

Name and Residence.	No. of Cows.	No. of Stacks.	Dimensions of Stack—Length, Breadth, Depth.	Materials of Stack.			Whether Dressed or Not.	Situation, "Below," "Partly Below," or "Above" Surface.	Has Firewood been made or stored in this shed?
				Walls.	Floor.	Roof.			
LANSFORD COUNTY.									
George M. Barry, Esq., Cambridge, Lancashire.	-	1	-	-	-	-	-	-	Yes, by having the straw made into a stack quite round on top. It was built up and covered with reeds. Builders' "smoke," and earth or clay. No firewood seen around stack.
Michael Sharkey, Esq., Portadown, Down, Londonderry.	-	1	-	-	-	-	-	-	No wood in building. It has been used as a cow house, and it has been covered with clay. On side where grass was grown.
LOUTH COUNTY.									
Mrs. Thomas Martin, Married to B. H. Taylor, Esq., N.L. Towlsey Hall, Drogheda.	-	1	-	-	-	-	-	-	A stack, 80 feet long, 16 feet broad, and 19 feet high when finished, covered by two parts of straw's straw and lower part, but reinforced by a three-part straw which can be worked five feet in stack.
MEATH COUNTY.									
Edward Kelly, Esq., Crumstown, Meath.	-	2	-	-	-	-	-	-	One stack 30 yards the second 4 yards in diameter, when first raised by a height of about 12 feet, which, under pressure of 20 inches of clay, has sunk to 6 feet. The smaller one had the grass all turned up, but the cows were taken up a pathway on its larger end, so it will stand there, the last 1 or 2 feet had to be broken up.
James Morgan, Esq., 2, St. James's Place, Dublin, Co. Dub., Co. Wick.	-	1	-	-	-	-	-	-	I cut about 16 acres of straw at election out in the morning up to noon, stacked and tramped in the afternoon. I took about 2 days to make stack did not find it necessary to keep temperature covered with clay (which I got from around the stack) about 15 inches deep. The middle of the stack stands like a wall, higher than the sides, wherever the sun, water will freeze in the center and spoil the stacks.
John A. Law, Esq., P.P. Ardmara House, Sligo.	-	2	-	-	-	-	-	-	In two stacks, ones started washed in rain and well tramped, topped up with straw and sods.
A. H. Wilkinson, Esq., Buncrana, Tern.	-	1 Male in 1887.	18 feet square.	-	-	-	-	-	Wilkinson, a stack of 100 tons, 16 feet broad, and 18 feet high, with grass from 1000 grass laid up from July to September.
Robert F. Hope, Esq., Longdown, Kilmore.	-	2	-	-	-	-	-	-	In second stacks, the larger 12 yards in diameter and 2 yards high above setting, made from freshly mown grass, wet loaded down with mud and hay.
C. D. O'Reilly, Esq., Bushmills Road, Kells.	-	2	-	-	-	-	-	-	In a stack, 12 yards long by 12 yards broad, and 10 yards thick, but dressed in grass, laid on low side of hill to take all away for the year to deliver the grass.

LEINSTER—continued.

Number of days occupied in turning silage or making stack.	Materials put in 800 or 1000.	Temperature		Quantity of ensilage in lbs. given to Cattle per day.	To what description of Cattle, if to horses, state sex, and how much.	Remarks.
		Greatest Heat.	Average Heat for first 18 days.			
10 days.	Grass.	Constant say.		Constant exactly say.	Cows, heifers, oxen, and calves. Some horses (No. 3, others do not).	I consider this the most valuable food for black cattle of all ages, and wonder it is not more generally used by the farmers of Ireland in our western climate.
20 days.	Old meadow grass, head-lands, and cutting from pasture.	Not on way of turning, only a portion of sun, which at present had could not be known in the above list.		Half feed daily with hay and roots to milking cows.	Yearling young heifers on the field also. They feed with half hay.	I have made ensilage for the great officers' rooms, and find it very good and healthy feeding for all kinds of stock, and think farmers should make a portion of grass into silage every year, so as to be prepared for a wet autumn when hay cannot be mowed. These days would have a quantity of nutritious food for cattle, which would otherwise not only be lost hay, but highly injurious to cattle.
10 days.	Good pasture meadow, cut before ripe.	1st degree, . . . 1st degree.		As much as they can eat without waste.	1 and 2-year-old heifers and bullocks.	Stacked about thirty tons grass each day, allowing the first day's work to stand until the heat was well up; then the grass added each day kept the stack sufficiently green and finished, then put on trees, turned the grass over and kept the heat as required. The silage good: cattle like it and thrive well. We make some ensilage in this way every year.
7 days.	Ordinary old meadow grass.	Not taken, as we began to put it on the 1st of July, and the stock was exposed.		Have not opened them yet.	Intend giving to some cattle during dry weather next month.	—
—	—	—	—	—	—	The ensilage prepared in the above way turned out first-class feeding for some last spring. I have never given ensilage to horses. The meadow which grew on the same field last summer was better than when the silage was made off by cattle. I have expended this same process last autumn, and am now about to open the new silage stack.
About a week each.	Grass and waste from pleasure grounds and ways.	Not ascertained.		Not ascertained, one good feed a day.	Stags, heifers and bullocks.	—
About 10 days.	Grass.	—	—	About 10 lbs.	Three cattle to spring.	Do not appear at all for spring feeding, but think it good in horses or pigs.
For the horses five days.	Old meadow straw.	1st degree to 1st degree, No marked change within 18 days.		About 10 lbs.	Aged bullocks to horses and mares. I once gave it to eat to a horse in a small quantity, but he rejected it as constant food.	I have always fed ensilage as a morning meal, giving hay in the evening. Last summer cattle refused hay after 10th of May, but ate ensilage so long as it was given them—the 11th of June.
About 3 days.	Grass only.	Over 100 degrees.	Very warm.	Never weighed it.	To young stock, 14-year-olds.	My stock (over 20) which I fed on ensilage did remarkably well, and were in good condition the next summer. I would recommend it for all young stock.

Name and Residence	No. of Sites	No. of Stacks	Dimensions of Site—Length, Breadth, Depth.	Materials of Site.			Whether Drained or not	Retaining "Jelly," "Filling," "Below," or "Above," Surface.	Has Drainage been made without a fill, and how?
				Walls	Floor.	Roof.			
MEATH COUNTY—continued									
F. B. Patterson, Esq., J.P., Fethville, Kells.	-	1	—	—	—	—	—	—	Round stack, 27 feet diameter, covered with sods and clay.
Charles O'Brien, Esq., Lord, Kells	-	2	—	—	—	—	—	—	Yes.
George Armstrong, Esq., Newrath House, Kells	-	2	—	—	—	—	—	—	Yes; I make a ring 25 feet high and sides with sods and clay 24 inches deep.
J. L. Noyce, Esq., D.L., Loughcrew, Co. Dub.	1	-	40 feet by 20 feet, 21 feet deep.	Stone.	Natural.	Wood covered with sods.	No.	24 feet below surface, and 2 feet above. Sods not on wood pillars as in last above, top of stone wall.	No.
Cliff Chalmers, Esq., J.P., Maynooth, Kells	-	1	—	—	—	—	—	—	Round stack, 20 feet diameter, 21 feet high, covered with clay 2 feet deep.
QUEEN'S COUNTY									
W. W. Deane, Esq., J.P., Boreen, Monaghan	-	1	—	—	—	—	—	—	Is an ordinary stack of 18 feet by 18 feet, 11 feet high, which was, when finished, covered with about 18 inches of clay.
WEXFORD COUNTY.									
W. L. Gibbons, Esq., J.P., Moate	-	2	—	—	—	—	—	—	In stacks, 20 feet long by 20 feet broad, 11 feet high, and 18 feet deep by 11 feet broad, 1 foot high, drained. The grass was dried on a stick by a large platform made by placing saws, cleavers across two long iron rods and raised to stack 24 inches and covered with clay.
John Edwards, Esq., J.P., Calverton.	-	2	—	—	—	—	—	—	I made two stacks in '97, 6 yards by 12 yards, and about 18 feet high before being weighted. The sides were slightly battened, and were neatly piled.
Richard Barrett, Esq., J.P., Kilmartin, Kilmartin	-	1	—	—	—	—	—	—	In a stack, 24 feet long and 18 feet high, covered with straw and sods, and raised by degrees, not drained.
J. F. Levinge, Esq., J.P., Glenties House, Kilmartin	-	1	—	—	—	—	—	—	Yes; 18 feet by 18 feet, 11 feet high, and about 18 feet high when finished, drained to about 4 feet after weighting, covered with sods and clay on the outside from 24 inches to 2 feet in thickness.
Thomas J. Smyth, Esq., D.L., Ballymore, Kilmartin	-	2	—	—	—	—	—	—	In stacks, 24 feet long, 18 feet high, and 20 feet deep, 18 feet high by raising the grass and tramping it well.
Mr. H. Kearney, Esq., for Wm. H. Kearney, Esq., Kilmartin, Kilmartin	-	2	—	—	—	—	—	—	Yes; I make a 12 feet by 12 feet, 18 feet high and about 18 feet deep, and the operation continued, and when finished weighted with clay.
WEXFORD COUNTY									
E. W. Warren, Esq., Spring Mount, Garry	-	1	—	—	—	—	—	—	A stack in field, 24 feet long, 18 feet high, and 18 feet deep, weighted with clay and covered with straw, not drained.

LEINSTER—continued.

Number of days required in silaging silage or ensilage	Materials put in Silo or Stack.	Temperatures.		Quantity of Ensilaged Silage given to Cattle per day.	To what description of cattle, if to horses stable up, and how much.	Remarks.
		Greatest Heat.	Average Heat for first 20 days.			
—	After grass.	—	—	—	To fat bullocks in October and November.	I have found that ensilage made at good temperatures is very valuable for keeping condition on good cattle from November to end of December. I think it almost as good as hay, instead of straw.
About one week.	Old meadow grass.	Not taken.	—	I never weighed the quantity given.	Dairy cows and young cattle.	—
10 to 14 days.	Good old meadow grass.	Never try	the heat.	I give only one cord of silage 14 to 15 lbs. per day.	Dairy cattle only.	—
11 days. Begun in 22 nd Feb., finished 22 nd Aug. at 1800.	Old meadow grass.	—	—	40 lbs. to cattle and 20 lbs. to calves.	—	No silage made this season till after hay was finished, quality very good.
4 days.	Green grass.	Not taken.	—	14 to 15 lbs.	Store cattle and milch cows.	Do not let any of the silage get to milk, as it will be very injurious to calves, but more eating it does not injure the flavour of milk or butter.
Over a month.	Green and oats.	—	—	Amount as they will eat.	Cattle and horses.	—
7 days.	Grass.	148 degrees.	130 degrees.	Amount as they will eat. I have not taken account of weight.	8-year-old bullocks and 2-year-old steers.	The bullocks are eating and doing very well. The steers, 24-year-olds, are only beginning to get in this week. I covered the stack at once when finished. The cow in Mrs. O'Leary was only given 20 lbs. of silage for hay, the horse was not given any.
About 10 days.	Grass.	No heat.	—	About 10 lbs.	Feed 4-year-old cattle, chiefly the milch.	Having made silage frequently, my experience shows there is no advantage in it, but it is essential that the stack should be weighed sufficiently—some 100 lbs. of earth dug from the land with side is sufficient. For feeding, I believe silage to be inferior to good hay, and in a fine season like this would not make it.
About 8 days.	Grass, grown very thick and on broad-leaved.	Not heated.	—	20 lbs.	Small cattle and young cattle.	All cattle seemed to thrive on it, along with turnip and dressed oats.
Off and on a fortnight.	Meadow grass, some pasture.	Can't say—regulated by weighing.	—	From 10 to 14 lbs.	None to horses, but some to cows.	Silage ought to be made in broken weather, when hay-making is an advantage. I think the average cost of both is about equal.
About three weeks as the weather varied.	Grass.	No record.	—	About 10 lbs.	Hybrid stock. Horses do not like it.	I fed silage of good value. I make it in wet broken weather when hay cannot be obtained. I am now using what was made in this, and the cattle eat it greedily.
10-14 weeks as the weather varied.	Old meadow grass.	140 degrees.	130 degrees.	30 lbs. per head.	Store cattle and young horses.	I fed store cattle twice early this following summer after being wintered on silage. I have been making a new lot for a number of years, and cannot do without it.
4 or 5 days.	Grass.	112 degrees.	90 degrees.	From 7 to 10 lbs. to small cattle.	Store cattle and young cows. None to horses.	I think every farmer should have silage; it is much better than roots and chaff.

Name and Residence.	No. of piles.	No. of stacks.	Dimensions of piles—Length, breadth, depth.	Materials of Sills.			Whether drained or not.	Situation—Below "Partly below," or "Above" surface.	Has the shore been made without a pile, and how?
				Walls.	Floors.	Roofs.			
WEXFORD COUNTY Mr J. Cairns at Ward, (at Lougha at Eyre, Esq., D.O., between, Keshmerry.	1	-	16 feet by 1 foot, 12 feet deep.	Stones, laid with cement	Concrete.	-Iron	Yes.	Partly below.	—
WICKLOW COUNTY Mr Robert Watson, Bart., D.O., Hollybrook, Esq.	1	-	12 feet by 12 feet, 40 feet deep.	Stone.	Stone.	Do.	Do.	Do.	No.
The General for the St. John Vincent, Protestant, E.P., Esq., D.O., the Foreman, Esq., Keshmerry.	1	-	20 feet by 12 feet, 8 feet deep.	Concrete.	Concrete.	Slate.	No.	Partly below and partly above. Below ground level, 7 feet.	None has been made here except in situ.
—	1	-	See observations.	Stones and mortar.	Do.	Corrugated iron.	Frequently damaged.	Partly below.	No.
Robert F. Brown, Esq., J.P., Midway, Dublin.	-	1	—	—	—	—	—	—	In a sand stack, 6 feet in diameter.

CLARK COUNTY.									
John Harley, Esq., J.F. Overland House, St. Charles.	1	—	—	—	—	—	—	—	Yes, you draw the trunk out from place it was a shovel full of hard, pure, dry pulp it up in straw making all the per- sone you can supply with the same if it is too dry, and add time to load up in very tough up to 14 feet, then weight on top with plank and stones, do
Major-General Ed- ward A. Gage, Esq., Secretary, Ordnance Office, Wash.	1	—	60 feet by 14 feet, 16 feet deep.	Mason work.	Concrete.	Galvanized iron.	No.	Above.	No.
COKE COUNTY.									
C. Arthur With, Esq., J.F. Wilson, Master	2	2	24 feet by 12 feet, 8 feet deep. Second as above.	Masonry.	Placed.	Steel.	Do.	Above.	1 stack of about 14 tons (Lumber) and 1 ramp system and 1 stack of about 20 tons stored over a long time, carried over by horse, and cut off, loaded in day, and worked with old iron rails.
ERRY COUNTY.									
Mr John C. B. Coburn Esq. U. S. De- partment of Justice	1	—	17 feet by 16 feet, 12 feet deep.	Ordinary masonry, inter- nal surface smoothed with cement.	Concrete.	Corrugated iron.	No.	Partly below.	No.
LIMBERICK COUNTY.									
John Melvin, Esq., Attorney, Newmarket Wash. Co. Liberia	2	—	30 feet by 12 feet, 2 feet deep.	Clay.	Clay.	—	—	Partly below.	—

LEINSTER—continued.

Number of days occupied in filling silo or making stack	Materials put in silo or stack	Temperature		Quantity of ensilage in lbs. given to cattle per day.	To what description of cattle, and to how many, and how much	Remarks.
		Cooling Room.	Average Heat for first 10 days.			
No record.	Waste grass from orchard, young grass, &c.	No record.	No record.	Whatever there will eat with other feeding.	To store cattle only.	The grass was mostly cut and stored into silo in wet weather, but was one day's drying at a time so that it was always well heated before we put in the next lot, which proved done in the furnace. The silo was not half full. Inferior grass, in well made, and inferior going on.
14 days.	Grass not fit for hay.	Not taken.	25 lbs.	Do not count.	Do not count.	—
11 days.	Enough grass to make silage and ensilage.	Not taken.	As much as they could eat.	Same cattle.	Same cattle.	Would prefer hay to ensilage, if weather at time of year would suit.
Cannot say.	Meadow grass.	Not taken.	Cannot say.	All chance of stock could be in the open and not to horses.	All chance of stock could be in the open and not to horses.	The above silo has been in constant use for 14 months. There is no silage already given to provide material for the next crop. Not a silo to be seen except in the morning. I find it with some silage left on the top, if in the open, and with plenty of old grass left on the top. I cannot get cattle to eat it as much as I have to do on another silo. I would not say I have used it extensively. If weather is fine, I make hay, so being cheaper and better. Silage is not so much used.
5 days.	Grass (Irish) old pasture grass.	Not taken.	50 lbs.	Same method.	Same method.	—

MUNSTER.

Grass from 1 to 14 days.	Grass cut from all quality of land.	My experience 100 degrees.	Grass at 100 degrees.	At 100 to 110 degrees frequently 30.	Grass cut from all quality of land. We have got it in a still-bed mixed with hay cut into small lengths, and mixed in large 500-lb. bags.	Grass given considered ensilage as good as well-made hay. It has not had any water, whereas I have only used it to feed the feeding cattle, and have found, so far, my cattle of it, and that I should never get it when I could secure well-made hay. It is a good feed at winter and early spring and could be on a better low fire in constitution and fresh than those fed on hay.
No record.	Meadow grass.	Not taken.	No record.	Milk and store cattle and young horses.	Not yet used.	—
April & May 1870, & 1871 & 1872.	Grass.	Not ascertained.	Given all to milk in the field.	Dairy cows and young horses.	Part of one of the silos was kept over from previous year and the quality appeared as good as new. The silage from both silos and stacks in stack appeared by cattle. I fed it next morning when horses and mares were running short; cattle those horses and hay then on hay silage, my sheep do not care for it. I consider it a most essential food.	—
—	Plantation grass.	Not ascertained.	Given all to milk in the field.	Milk cows.	—	—
10 days.	Grass as in previous silage.	Same not tested.	Have not weighed the ensilage with hay.	In-calf cows, milk cows and young horses.	In the early part of each morning I cut with mowing machine about half-acre of meadow, and put that into the silo before night and cut about same every day till finished. Grass covered over with old hay grass and finally with dry weeds, &c., in long all run. I have found ensilage good feeding (feeding for in-calf cows, milk cows, yearlings and horses). For wet harvest I believe ensilage to be better than hay.	—

PROVINCE OF

Name and Residence	No. of Silos.	No. of Stacks	Dimensions of Silos—Length, Breadth, Depth.	Materials of Silos.			Whether Drained or not	Shading "Below," "Partly Below," or "Above" Surface.	Has Drainage been made without a Run, and how?
				Walls	Floors	Roofs			
TIPPERARY COUNTY.									
W. T. Trevel, Esq. D.L., Bathwood, Limerick.	2	2	(1) 36 feet by 12 feet, 10 feet deep (2) 30 feet by 12 feet, 22 feet deep	Masonry; lined with cement. Do.	Clay. Do.	Galvanized iron, raised 6 feet over top of silos. Do.	No. Do.	Partly below. Do.	In stack, drawing the grass on to it exactly like a concrete slab, then drawing it with planks and weighting with stones, and covering with waste rubbish to keep out rain.
The Right Hon. Lord Dunboyne, D.L., Killboy, Rosslough.	—	1	—	—	—	—	—	—	In stack, 20 feet diameter, 30 feet high in field.
General Greave, Esq., J.P., Green Park, Dublin.	—	1	—	—	—	—	—	—	In a stack to the field where the grass grows. I have a straw-sieve I think I have at present in use, by the roadside and at a silo.
WATERFORD COUNTY.									
Mr. Robert Mayhew, Manager to H. G. O'Brien, Esq., D.L., Dromahaire, Cappoquin.	1	—	20 feet by 10 feet, 16 feet deep.	Stone.	Stone.	Iron.	No.	Below.	The ordinary silos weighted with stone.

PROVINCE OF

ANTRIM COUNTY.									
G. M. Culwell, Esq., Lisnagry, Drogheda.	—	1	—	—	—	—	—	—	In a stack, 50 feet by 20 feet, 10 feet high and weighted with stones under a log butt.
James Treane, Esq., Steward to Thomas Montgomery, Esq., J.P., Ballybrack, Drumahaire.	1	—	30 feet by 8 feet, 20 feet deep.	Stone and lime, lined with cement.	Concrete.	Corrugated iron, dressed.	Below.	—	—
CAYN COUNTY.									
John Fay, Esq., J.P., Mayo Hall, Carrigrohane.	—	1	—	—	—	—	—	—	I have no silo, never had.

MUNSTER—continued.

Number of days occupied in filling silo or making stack.	Materials put in silo or stack.	Temperature.		Quantity of ensilage in lbs. given to cattle per day.	To what department of cattle, if to horses state so, and how much.	Remarks.
		Steaded Heat.	Average Heat for last 24 days.			
—	Good grass.	—	—	Unknown.	To store cattle in the field.	No ensilage made last year. I did not make quite so much as last year but am still of the same opinion as to its value as a silage food for stock.
Not taken.	Grass.	Not taken.	—	About 2 stone each.	24 years old store cattle.	—
—	Good grass.	Not taken.	—	I have given as much as they will eat. Did not weigh it.	I have given it to my cows to make as usual.	I have made ensilage for every year for the last twelve years, never in a wet, always in a stack, in or near the field in which the grass grew. Some years I had a stack three or four days older than I had a silage pit. If the weather is dry, I make silage as usual. If the weather is wet, I make silage as usual. The stack should be below the stack of once while grass and wet. I make my stacks about 16 or 18 yards wide, each stack will take about 8 or 10 acres of grass. Care should be taken to keep the sides of the stack very straight, have as little as it, keep the outside edges well watered and hard, to keep out the air. I make the stack as high as the man can fork the grass off a tressel. When there is much of grass in I put about 15 inches of clay or earth on the top to keep it pressed and keep out the air. When the stack gets high, it is better to let it rest for a day or two to let it settle, and to work on it every second day. It is no trouble to make it. I never move the sides and always make it above ground. A few weeks of coarse grass will do, and as much as you can get. Cattle are very fond of it and prefer it to the best hay. I like to give cattle one kind of ensilage and another of hay in the day. I have given it to every kind of animal, and also to pigs. I have never given it to a single cattle, but always to store cattle out in the winter. All cattle have done well on it.
About 15 to 20 days.	Pure grass.	Not taken.	—	About 2 stone.	Dry cattle.	I consider ensilage a valuable food, as we fed 50 cattle much, only on it 12 months ago on bare land, and they did remarkably well.

ULSTER.

14 days.	Meadow grass.	800 degrees.	—	As much as they can eat.	Cows in milk.	I have such a small quantity, I have not begun to say it. I will begin in March.
14 days.	Meadow grass.	—	—	About 16 lbs. each.	Dairy cows.	Ensilage very good, little or no waste; weighted with earth, about 10 lbs. to the square foot.
—	—	—	—	—	—	I have been making silage for the last seven or eight years. When the first of my ensilage is put I cannot cut it, when the weather is wet or dry. If the weather is dry I make hay, if wet I make silage. I put making hay when it rains, and quit making when it is dry. I have put when it rains and when it is dry. I prefer the silage. I make the silage by being on sticks or poles, they must be perpendicular. When practicable the sticks or poles should be laid at the bottom of the silage in order to save labour. The wet grass should be cut with forks and tramped by one or two men or a dog with hay. The process may be continued for several days. The grass will then become better. The work at this time or more should be discontinued, a new pile commenced, and the same process followed. When it becomes heated out it, and so back to the first pile. Change from pile to pile as long as there is grass to put on them. They should be then covered with hessian or white, the edges with mud, and the whole with a quantity of dirt, which can be had by cutting a trench round the pile. A little salt shaker through the silage is useful. It cures it and increases the heat. I do not take any compensation. The men who work it have no difficulty in knowing when they should commence putting on the grass. It will not be fit for use for four months after it is made. It will keep for years. I use it off with a few kinds as I would hay, cut it right into squares, and give as much of it to cattle and horses as all kinds, on the ground and in mangers as they will eat close.

PROVINCE OF

Name and Residence.	No. of Sites.	No. of Studies.	Dimensions at Right-Angle Length, Breadth, Depth.	Materials of Sites			Whether Demolished or not.	Situation— "Below," "Partly Below," or "Above" Surface.	Has Surface been made without a Site, and how?
				Walls.	Floor.	Roof.			
CAYAN COUNTY.									
Mr. W. Marshall, for J. Henderson, Esq., 21, Chesworth, Belvidere.	—	1	—	—	—	—	—	—	Built in a round stack on the level ground, 40 feet diameter by 3 feet high, surrounded with stone, covered over with hay.
Edward H. Gibson Esq., Agent for Capt. Wm. L. Hamilton, J.P., Oakfield, Belvidere.	1	—	22 feet by 18 feet, 12 feet deep.	Concrete.	Concrete.	—	Demolished.	Below surface in site and where ruins are to be seen. The site is on a road.	No.
DOWN COUNTY.									
Edwin A. Murray, Esq., per Mr. H. C. Murray, Portlough, Down House, Portlough.	1	—	12 feet by 12 feet, 12 feet deep.	Stone & cement.	Concrete.	Slate.	Not.	Partly below.	No.
FERRAHUGH COUNTY.									
Mr. William Murray, for the Right Hon. the Earl of Eglinton, 10, St. John's, Dublin Castle, Down.	1	—	20 feet by 14 feet, 12 feet deep.	Stone and iron.	Concrete.	Field.	Demolished.	Above.	Not far from ruins.
The Right Hon. Charles H. Baskin, Esq., Lord Bishop of Cloyne, Knockmallock.	1	—	12 feet by 12 feet, 11 feet & 6 inches deep.	Concrete.	Natural gravel.	Hay.	Natural drainage.	Chiefly below the surface.	—
LONDONDEKKY COUNTY.									
J. E. Dwyer, Esq., M.P., for Mr. Dwyer, London.	—	2	—	—	—	—	—	—	I have no bulk site. I always make my surface on level above ground except where it is the base of an oblong stack, which is made in such a way, and when finished covering the top with earth, clay, or mud, or broken material with stones.
Mr. John Baskin, Esq., M.P., for Mr. Baskin, London.	1	—	12 feet by 12 feet, 8 feet deep.	Field and iron gravel.	—	—	Not.	Below.	—
STRANGE COUNTY.									
Col. H. Knox-Brown, Esq., for Mr. Knox-Brown, London.	—	2	—	—	—	—	—	—	Has been made in stone and round stacks in the open field.

PROVINCE OF

DALWAY COUNTY.									
Mr. W. E. Dwyer, Esq., for Mr. Dwyer, M.P., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	1	1	22 feet by 12 feet, 12 feet deep.	Stone and mortar plastered.	Concrete.	Concrete and plastered over.	Not.	Above.	Yes, in a round stack in the field, and covered with stone one foot deep of clay.

ULSTER—continued.

Number of days occupied in filling silo or making stack.	Material put in silo or stack.	Temperature.		Quantity of ensilage in lbs. given to cattle per day.	To what description of cattle, if to horses, state sex and age of stock.	Remarks.
		Driest Heat.	Average Heat for five to six days.			
12 days.	Grass.	Was not taken.	Not taken.	10 lbs. each and some hay.	Young growing cattle.	—
On and on 24 days.	Second and third - clean grass which grows under trees.	Not taken.	Not taken.	10 to 15 lbs. daily, besides some stored cattle.	Not given to horses.	The fine weather has enabled me to fill our silo as full as usual, and, notwithstanding the low quality of the hay then made, the cattle seems to thrive and improve on the ensilage, which is made from our inferior grasses.
About 4 days.	Old meadow grass and portions of lucerne and plantations.	125 degrees.	96 degrees.	14 lbs. to cows.	Milk cows and calves. Horses would eat it greedily, but it is not given to them.	It is an excellent food for cattle, served in conjunction with hay or straw and roots.
12 days.	Natural grass.	Not taken.	Not taken.	10 lbs. to two fowls to two grown cattle.	Harped cattle only.	I find sweet ensilage a superior food for milk cows. It increases the quantity and improves the quality of the milk.
6 days.	Best old meadow grass.	—	—	—	Milk cows and stores.	Never better than this year.
About 1 week.	Rough grass.	Not taken.	Not taken.	14 & 12 lbs. to 12 sheep about 10 lbs.	All classes of cattle, horses, and sheep.	I have now made ensilage every year for the last twelve years—always in stacks. Last year I did not give up as I had made, and this year I find the two-year-old silage very good, and in every respect the same as that made in 1886. On my farm the making of ensilage is one of the ordinary routine duties of the farm, similar to the growing and potting of potatoes, turnips, &c.
10 days.	Orchard and rough plantation grass.	Not taken.	Not taken.	12 to 14 lbs.	Both cattle and sheep.	The silo is empty, on day in corner of a field, the silage of which is well dried and, with some of hay thrown in here and there. The sides keep up fairly well, they are not perpendicular. Having a slope towards the front it is cleared, so no drainage is required.
Between 10 to 20 or 4 days between each day's work.	Natural meadow grass and grass off lucerne.	125 degrees.	96 degrees.	12 to 14 lbs.	Store cattle and milk cows (young cattle about 14 lbs.)	The stack, after each day's work, is almost covered with plants and weighted with stones, and when finished is covered with hay, about 100 lbs. to 1 square foot, and headed on top, and clipped so as to leave all run.

CONNAUGHT.

—	Grass.	Not taken.	Not taken.	4 vices each to milk cows, also 2 stores to each.	Milk cows and store cattle.	The filling of silo and making stack was carried on for about three weeks at intervals, my one day at sometimes two, working at it, and then left for two or three days to allow fermentation to go on.
---	--------	------------	------------	---	-----------------------------	---

CONNAUGHT—continued.

Number of days occupied in making silage or making stack.	Materials put in silo or stack.	Temperature.		Quantity of Foodstuffs in the silage or stack given to cattle per day.	To what description of cattle if to horses, sheep, &c., and how much.	Remarks.
		Greatest heat.	Average heat for first 10 days.			
10 days (stack).	Grass, under very heavy and hard rain.	Weather very hot.	Not taken.	25 lbs. to 30 lbs. daily, mixed with hay.	3-year, 1-year, 2-year, mixed with 5 lbs. hay, and some 20 lbs. daily, mixed with 15 lbs. hay.	This year we had our ensilage risk much longer in being than usual, having commenced 26th July, and only finished 6th September. Notwithstanding, the quality of the ensilage is first class. We keep it some pressure on our tank when it is to be used down on a week or 5 days. To make good ensilage you must have good pressure.
1 week (concentrate).	Grass, intended for hay.	Not taken.	Not taken.	40 lbs. per head, wintered out on pasture.	3 and 1-year-old bullocks and calves, 20.	Stack made on wet days when hay could not be made. Weighted with racks laid on old boxes and planks, heavily covered by cattle.
Culmure.	Some grass and some rough grass.	Not known.	Not known.	About 4 lbs.	Milk cows and young calves.	Stack made shortly in my absence from home and no accurate account kept about it.
Four days, and weighed with scales; after 10 days 1 day more, and finished up.	Grass, 4 lbs. w. natural grass.	Not taken.	Not taken.	One feed daily since January.	6 months, 10 years, 2 years, 10 years, 10 years.	I have discontinued ensilage feeding as 2 years states to be sold in April or May, as the silage gave an appearance of being small, but the bulk shows off and makes the cattle look too smooth. But those kept over for my own summer grazing I find in no way equal to summer grass.
Two days (silage, one month).	Grass, green.	Not taken.	Not taken.	Not weighed, a good feed daily.	Calves, cows, 5-year-olds and yearlings.	Full silage is that going out of favour, not half as much made as last year was.
11 days.	Grass, green.	Not taken.	Not taken.	25 lbs.	Watch cows before and after.	Grass green from bottom meadows and along stream and near plantations has been cut and carried direct to the ensilage stack, and when it got high was then covered with a rather deep of straw, and not otherwise covered.
First stack 2 days, second 7 days.	Grass.	Not recorded.	Not recorded.	As much as they can eat.	Store cattle, not in house.	Cattle out good, better the grass the better the ensilage and had grass is much better in ensilage than in hay.
About 10 days.	Grass, green and silage.	Not observed.	Not observed.	15 lbs.	Milk cows.	An excellent system, especially during a wet season. The grass is, a certain amount of the field and put into the stack, wherever the weather is not too wet for the milk to stand out, and then the grass, which would otherwise go to loss, and convert it into valuable winter feeding.
From 10 days to 15 days.	Grass, green in full and not green, coarse grass.	120 degrees.	120-4 degrees.	From 20 to 30 lbs. to 100 lbs. daily.	Store cattle, out-land.	This is the first season I have given the green grass to cattle, unstacked, and I had the cattle put it up clean and are doing well on it. The grass was in full and when cut and very heavy crop, and hence better in straw.
About 10 days.	Some 10 acres good grass and 5 acres from under trees.	Did not take it.	Did not take it.	40 lbs. to a full-grown head.	To milks cows and young calves.	I am still of opinion ensilage is a first-class feed for stock out of the farm, wintered young, and much cheaper to make than hay, especially if the weather is very dry. I find, if given to dairy cows at all indoors, it takes the milk.

Name and Residence.	No. of Silos.	No. of Stocks.	Dimensions of Silos—Length, Breadth, Depth.	Materials of Silos.			Whether Drained or not.	Signation Below, or Partly Below or Above Surface.	Has Foundation been made without a Silo, and how?
				Walls.	Floors.	Roofs.			
WATTS COUNTY —									
Mr. James Davidson, of Lady Marion Whitcomb, Old Road, Westport.	—	1	—	—	—	—	—	—	Yes in a stack 30 feet long, 11 feet broad, and 8 feet high, partly below sur- face.
ROSCOMMON COUNTY.									
John Anderson, Esq., Road Hill House, Doyle.	—	1	—	—	—	—	—	—	Stacked on field, in two bags, 25 feet long, and 19 feet high, loaded with a lot of hay, and covered with bag or rubbish.
The Right Hon. The Governor, Esq., P.C., P.M., C.B., Clonsilla, Clonsilla.	2	2	—	—	—	—	—	—	—
Martin O'Shea, Esq., Doonry, Roscommon.	—	1	—	—	—	—	—	—	In a stack 30 feet long, 14 feet broad, 7 feet high, also stacked.
The Right Hon. Lord Ormonde, Esq., per Mr. John P. Mahony, Mans Park, Roscommon.	2	—	(1) 30 feet by 18 feet, 10 feet deep. (2) 20 feet by 18 feet, 10 feet deep. (3) 20 feet by 8 feet, 10 feet deep.	Concrete. Do. Do.	Concrete. Do. Do.	Slated, Do. Do.	Not Do. Do.	Below upper yard and on a level with fencing yard.	Not this year.

CONNAUGHT—continued.

Number of days occupied in silaging silos or packing stack.	Materials put in silo or stack.	Temperature.		Quantity of ensilage on the ground to cattle per day.	To what description of cattle it is given, and how much.	Remarks.
		Greatest heat.	Average heat for first 20 days.			
4 days.	Good.	—	—	20 lbs.	2 and 3-year-old store cattle.	—
10 days.	Good grass.	—	—	20 lbs., with a little hay.	24-year-old bullock.	I stack the grass in the field it grows on to save cartage, if possible.
—	—	—	—	—	Store cattle and cows.	I have had ensilage made as described in former years. One silo, the grass when filled in, covered with a large quantity of peat mould, or, as it is called here, bog stuff. The stacks I weighted over with long poles in the shape of a sick. I find these methods answer admirably.
Of and on the 2 weeks.	Good and had grass.	Not known.		Given in morning to cows in the evening hay.	—	I find, for the little expense I had, it is a great economy in bad weather to make ensilage when you cannot make hay, and does not well on it.
About 2 days to each.	Freshly cut grass from overland.	120 degrees.	84 degrees.	About 18 lbs.	Horries, mixed on grass run.	—

THE WEATHER.

Abstract of Meteorological Observations registered at the Ordnance Survey Office (Height above the Sea 155.3 Feet), Phoenix Park, Dublin, during the year 1898:—

The barometer stood highest in 1898, on the 23rd January, at 9 A.M., wind W, when it was 30.596 inches; it was lowest at 9 A.M. on 25th November, when it was 29.770 inches, wind N.E. The highest temperature of the air during the year was 80.0 degrees of Fahrenheit on 6th September, and the lowest 22.9 degrees on 24th February. The greatest quantity of rain which fell in a day (24 hours) was 2.245 inches on 23rd November, with wind calm. The point from which the wind chiefly prevailed was the W.; it blew from that direction on 130 days, at 9 A.M. The strongest wind was from the S.S.W. on the 13th April, when the pressure was 3.50 lbs. per square foot.

1898.	BAROMETER.						TEMPERATURE.									
	Corrected for Altitude and reduced to 32° Fah.						Self-Registering Thermometers.					Hygrometers.				
	Mean.				Highest in Month.	Lowest in Month.	Mean.			at 9 A.M. Mean.					Winds from all Quarters.	Direction.
	10 A.M.	30 A.M.	Mean.	Range.			Highest in Month.	Lowest in Month.	Range.	Of all Heights.	Of all Levels.	Temp.	Range.	Dry Bulb.	Wet Bulb.	Dew Point.
January.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
February.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
March.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
April.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
May.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
June.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
July.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
August.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
September.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
October.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
November.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
December.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
Total.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226
Mean.	30.212	30.297	30.226	0.085	30.596	29.984	30.226	29.984	0.242	30.226	30.226	30.226	0.242	30.226	30.226	30.226

1898.	RAIN.				CLOUD.		WIND.									
	Total Amount for Month.				Monthly Total.		Number of days & how far various directions at 9 A.M. and the total pressure in lbs. per square foot.									
	Total Amount for Month.				Monthly Total.		Number of days & how far various directions at 9 A.M. and the total pressure in lbs. per square foot.									
	Total Amount for Month.				Monthly Total.		Number of days & how far various directions at 9 A.M. and the total pressure in lbs. per square foot.									
January.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
February.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
March.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
April.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
May.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
June.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
July.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
August.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
September.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
October.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
November.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
December.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
Total.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
Mean.	15	20.9	20.9	20.9	20.9	20.9	15	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9

METEOROLOGICAL OBSERVATIONS

FOR EACH MONTH OF THE YEAR 1898.

By J. W. MOORE, Esq., M.D., F.R.C.P.L., F.R. M.S., SOC.

(Extracted from the *Dublin Journal of Medical Science*.)

JANUARY, 1898, establishes a record for high temperature—the mean was above the average all over North-western and Western Europe, including France and Northern Germany. In Dublin it was 47.8° , or 12° above the value for the warm January of 1875. An anticyclone over Central Europe, with depressions over the Norwegian Sea and Northern Europe, caused S.W. winds off the Atlantic and the high temperature of the month. There was at the same time a deficient rainfall, which is unusual.

In Dublin the arithmetical mean temperature (47.8°) was much above the average (41.4°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 47.4° —a record warmth for January. In the thirty-three years ending with 1897, January was coldest in 1881 (M. T. = 39.2°), and warmest in 1875 (M. T. = 49.6°). In 1897 the M. T. was 38.1° . As a general rule, January in Dublin is not colder, but a shade warmer, than December. This is owing to the full development in January of a winter area of low pressure over the Atlantic, to the north-westward of the British Isles, and to a resulting prevalence of S.W. winds in their vicinity. January, 1898, proved no exception to this rule, the M. T. being 25° above that of December, 1897 (44.9°).

The mean height of the barometer was 30.392 inches, or 0.828 inch above the corrected average value for January—namely, 29.574 inches. The mercury rose to 30.589 inches at 9 a.m. of the 23rd, and fell to 29.234 inches at 9 a.m. of the 1st. The observed range of atmospheric pressure was, therefore, 1.255 inches.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 47.4° , or 10.1° above the value for January, 1897. Using the formula, *Mean Temp.* = $\frac{1}{2}(\text{max.} + \text{min.}) \times .52$, the M. T. becomes 47.9° , compared with a twenty-five years' average of 41.5° . The arithmetical mean of the maximal and minimal readings was 47.8° , compared with a twenty-five years' average of 41.4° . On the 30th the thermometer in the screen rose to 60.8° —wind, S.W.; on the 1st the temperature fell to 31.9° —wind, W. The minimum on the grass was 30.0° , also on the 1st.

The rainfall was 1.786 inches, distributed over 14 days. The average rainfall for January in the twenty-five years, 1865-89, inclusive, was 2.209 inches, and the average number of rainy days was 17.3. The rainfall, therefore, and also the rainy days were below the average. The record rainfall for January was in 1898—namely, 5.711 inches on 24 days. In 1876, only .496 inch was measured on but 9 days; and in 1880, the rainfall was only .863 inch on but 8 days. In 1897, 2.694 inches fell on 17 days.

The atmosphere was foggy on the 1st, 2nd, 3rd, 5th, 13th, 14th, 15th, and 26th. High winds were noted on 8 days, reaching the force of a gale on 4 days—the 18th, 19th, 29th, and 30th. There was no snow, sleet, or hail. Temperature exceeded 50° in the screen on 21 days; while it fell to or below 32° in the screen on only one night, compared with 12 nights in 1897, only 3 in 1896, 18 in 1895, 7 in 1894, 4 in 1893, 15 in 1892, 7 in 1891, 1 night in 1890, and 3 nights in 1889. The minima on the grass were 32° , or less, on only 3 nights, compared with 21 nights in 1897, 8 nights in 1896, 29 in 1895, 17 in 1894, 16 in 1893, 25 in 1892, 31 in 1891, 15 in 1890, and 16 in 1889. Solar halos were seen on the 1st and 2nd; lunar halos on the 1st, 3rd, 9th, and 31st.

New Year's Day, 1898, broke calm, foggy, and frosty. A solar halo was seen at 1 p.m. Dense, wet fog formed at 4 p.m. During the week ended Saturday, the 8th, there was a spell of open, but rainy and generally changeable, weather. The prevalent trend of the atmospheric currents across North-western Europe was from S.W. to N.W., but no very large or deep depressions were observed, and so there were no gales of any magnitude. Even on the Continent there was but little frost, and what did occur was intermittent only. In the South of Russia and in Hungary, however, freezing weather of some intensity was reported within the limits of an anticyclone which had held its position over those regions with considerable steadiness since December 27. On Sunday a shallow depression off the S. of Ireland caused a heavy rainfall in this country and in Wales. On Monday evening a dense wet fog hung over Dublin for a time. A red sunrise on Tuesday morning ushered in a new depression, which brought a still heavier downpour to the Irish and Welsh stations. By Wednesday morning the area of precipitation had extended to England. A brief spell of finer and very warm weather was followed by a renewed rainfall on Thursday afternoon. Friday was at first brilliant, then cloudy. A partial eclipse of the moon was seen at night. Saturday proved changeable, with rain in the afternoon and evening. In Dublin the mean height of the barometer was 29.892 inches, pressure ranging between 29.639 inches at 9 a.m. of Sunday (wind, E) and 30.167 inches on Monday afternoon (wind, calm). The corrected mean temperature was 46.4° . The mean dry bulb reading at 9 a.m. and 9 p.m. was 45.7° . On Wednesday and again on Thursday the sheltered thermometers rose to 54.7° , having fallen to 37.9° on Sunday. The rainfall was 1.107 inches on six days, 4.08 inch being measured on Sunday. South-westerly winds prevailed.

The weather remained very mild during the week ended Saturday, the 15th, the remarkable point being that both the barometer and the thermometer ranged high. Also it is unusual for fine weather and high temperatures to go hand and hand in winter. The period was rainless at many stations in Great Britain and in the East of Ireland. On Sunday morning cyclonic systems of no

great depth were found off the North of Scotland and the North of Spain, while anticyclonic systems existed to the westward of Ireland and over the Baltic and Germany. Fine, quiet weather prevailed. Throughout the remainder of the week a large anticyclone stretched east and west across Central Europe, while depressions passed north-eastwards or eastwards across the extreme North of Europe. At first the British Islands lay well to the north of the centre of highest pressure, and so fresh S.W. to W. winds blew generally. On Friday the home countries came more under the influence of the anticyclonic calm area, so that the weather improved, becoming cooler and finer. Saturday was a pleasant, sunny day. In Dublin the mean height of the barometer was 30.856 inches, pressure ranging from 30.890 inches at 9 a.m. of Sunday (wind, W.S.W.) to 30.554 inches at 9 p.m. of Saturday (wind, S.S.W.). The corrected mean temperature was 46.0°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 45.6°. On Wednesday the screened thermometers rose to 53.6°; on Monday they fell to 36.9°. A very perfect lunar halo appeared on Sunday evening. The prevalent wind was again S.W. There was no rainfall in or near Dublin.

The open weather so characteristic of the present winter held throughout the week ended Saturday, the 22nd. Fine at the beginning and close, it was rainy and stormy during the middle of the period; but temperature was persistently above average, sometimes remarkably so. All through the week an anticyclone, in which the barometer stood as high as 30.60 inches, lay over Central Europe, where calm, foggy, and very cold weather prevailed. Thus at Munich the 8 a.m. thermometer readings were 23°, 18°, 18°, 15°, 18°, 18°, and 33° respectively. Meanwhile the barometer was low over the Norwegian Sea and Lapland—in the latter country it fell below 28.80 inches on Wednesday (to 28.76 inches at 8 a.m. at Haparanda). Strong S.W. to W. winds or gales swept over the British Isles and Scandinavia on this day, accompanied by only moderate rainfalls, but by strangely high temperature. At Wick the thermometer rose to 60° in the shade, 3° above any maximal shade temperature recorded at that station in January since 1871, the previous highest reading being 57° in January, 1860. By 6 p.m. the thermometer had fallen 21° at Wick—namely, to 39°. On Saturday morning a small depression passed eastward across Scotland, and in its rear a brisk fall of temperature took place, extending to Ireland and England later in the day. In Dublin the mean height of the barometer was 30.265 inches, pressure falling from 30.475 inches at 9 a.m. of Sunday (wind, S.E.) to 30.061 inches at 9 a.m. of Wednesday (wind, W.S.W.), and rising again to a maximum of 30.364 inches at 9 p.m. of Saturday (wind, N.E.). The corrected mean temperature was 50.6°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 50.1°. On Sunday the screened thermometers fell to 36.8°; on Wednesday they rose to 57.7°. The rainfall was 3.38 inch on four days, 1.80 inch being measured on Wednesday. The prevailing wind was S.W.

Another week—ended Saturday, the 29th—of singularly mild, fine weather has to be recorded. In Dublin the corrected mean temperatures of the past four weeks have been 46.4°, 46.0°, 50.6°, and 48.8°—all of which values are far above the average for January. As in previous weeks, the distribution of atmospheric pressure has been anticyclonic (high and steady) over the southern half of the British Islands and Central Europe, cyclonic (low and unstable) in Northern Europe and to a less extent in the Mediterranean Basin also. Ireland lay constantly in the track of the S.W. winds of the N.W. quadrant of the anticyclone, and so the weather was throughout mild in this country. On Sunday morning, and to a less extent on Friday and Saturday, comparatively low temperatures occurred in England—in fact, frost was registered on Sunday morning, when the thermometer fell to 29° at York and Loughborough, and to 30° at Cambridge. At this last station a minimum of 28° was recorded on Saturday. On Wednesday and Thursday a vast and deep depression passed eastwards across Lapland—at 8 a.m. of Thursday the barometer was down to 28.50 inches at Haparanda, on the Gulf of Bothnia, whereas it stood 2 inches higher (30.50 inches) at Lyons. At the time mentioned the thermometer read 31° at Haparanda but only -6° at Hermansdahl in Transylvania, 20 degrees of latitude further south. On Saturday a new depression in the far N.W. and N. caused the wind to freshen to a gale from S.W. in Ireland, with a moderate rainfall. In Dublin the mean height of the barometer was 30.419 inches, pressure varying from 30.583 inches at 9 a.m. of Sunday (wind, S.) to 30.239 inches at 9 p.m. of Saturday (wind, W.S.W.). The corrected mean temperature was 48.8°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 48.3°. On Friday the screened thermometers fell to 40.8°, on Saturday they rose to 50.0°. Rain fell on Saturday to the amount of .034 inch only. S.W. winds again predominated.

The mild weather of the month culminated on Sunday, the 30th, the mean temperature of which was 50.9°, while the extremes were—highest, 60.8°; lowest, 32.9°. The 31st was changeable—at first fair and colder, then milder, squally, and rainy.

In Dublin the rainfall up to January 31st, 1898, amounted to 1.786 inches on 14 days, compared with 2.694 inches on 17 days in 1897, only .790 inch on 14 days in 1896, and with a twenty-five years' average (1865-1899) of 2.200 inches on 17.3 days.

At Knockishan, Greystones, Co. Wicklow, the rainfall was 2.345 inches on 13 days, compared with 3.660 inches on 20 days in 1897, only .485 inch on 7 days in 1896, and 6.190 inches on 19 days in 1895. The heaviest falls in 24 hours were 1.030 inches on the 2nd, and .330 inch on the 1st.

At Gloucevin, Killiney, Co. Dublin, the rainfall was 1.580 inches on 13 days, .620 inch being measured on the 2nd. The average fall in January for the 12 years, 1885-1896, was 2.235 inches on 16.3 days. In 1894, the rainfall was 3.260 inches on 23 days; in 1895, 3.930 inches on 24 days; in 1896, 7.000 inch on 9 days; and in 1897, 3.080 inches on 20 days.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, rain fell on 9 days in January, the total measurement being 2.316 inches. On the 2nd, 1.004 inches were registered; on the 1st, .486 inch; and on the 4th, .368 inch. At this climatological station the thermometer in the screen did not sink to 32° on any night. The highest temperature in the shade was 58.8°, on the 30th, the lowest was 34.0°, on the 10th.

FEBRUARY.—Of average mean temperature, this month was no less than 5° colder than January. It was a rainy month, for there were only ten days on which there was no registerable rainfall; but the downpours were not heavy, except on the 17th, when more than half an inch was recorded. The prevailing winds were W. and S.W., and the force of the wind was often considerable. On the whole, the month was a fairly average February.

In Dublin the mean temperature (42.9°) was 0.1° above the average (42.8°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 41.3°. In the thirty-three years ending with 1897, February was coldest in 1895 (M. T. = 34.4°), and warmest in 1869 (M. T. = 46.7°). In 1897 the M. T. was as high as 46.0°.

The mean height of the barometer was 29.925 inches, or 0.071 inch above the average value for February—namely, 29.853 inches. The mercury rose to 30.280 inches at 9 p.m. of the 11th, and fell to 29.070 inches at 7.15 a.m. of the 21st. The observed range of atmospheric pressure was, therefore, 1.219 inches.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 41.3°, or 0.1° below the value for January, 1898. Using the formula, *Mean Temp. = Min + (max. - min.) × 50*, the M. T. is 42.9°, compared with a twenty-five (1865-1889) years' average of 42.8°. On the 1st the thermometer in the screen rose to 59.0°—wind, S.W.; on the 24th the temperature fell to 28.1°—wind, W. The minimum on the grass was 27.0°, on the 23rd—wind, N.W.

The rainfall was 1.743 inches, distributed over 18 days. The average rainfall for February in the twenty-five years, 1865-89, inclusive, was 2.150 inches, and the average number of rainy days was 17.2. The rainfall, therefore, was below, while the rainy days were above the average. In 1883 the rainfall in February was large—3.752 inches on 17 days; in 1879, also, 3.706 inches fell on 23 days. On the other hand, in 1891 only .042 inch was measured on but 2 days. The rainfall in 1891 was much the smallest recorded in February for very many years. The record is probably unparalleled in Dublin—.042 inch on 2 days.

The atmosphere was foggy on 3 days—the 17th, 23rd, and 24th. The amount of cloud—50.4 per cent—was much below the average—66 per cent. High winds were noted on 18 days and reached the force of a gale on the 1st, 2nd, 4th, 12th, and 15th. A solar halo was seen on the 5th; lunar halos were seen on the 4th and 6th.

The temperature reached or exceeded 50° in the screen on 11 days, and it fell below 32° on 7 nights, compared with as many as 18 nights in 1895, and only 1 night in 1896. The minimum on the grass was 32°, or less, on 10 nights, compared with every night in 1895, 10 nights in 1896, and 4 nights in 1897. The thermometer once failed—on the 21st—to rise to 40° in the screen.

The weather fell into a very changeable state during the period ended Saturday, the 5th. At 8 a.m. of Sunday, January 30, the barometer ranged from 30.80 inches at Lyons to 29.85 inches at Bodø, in the N.W. of Norway. Hence strong S.W. or W. winds or gales were prevalent and temperature was extremely high. The reduction of atmospheric pressure in the N. culminated on Wednesday morning, when the barometer was down to 29.37 inches in the Shetlands. Strong W. to N.W. gales were felt on the British and Irish coasts. With the veering of the wind to N.W., temperature gave way briskly. The depressions also began to travel south-eastwards across Scandinavia and the North Sea, so that by the end of the week winter seemed fully established over North-Western Europe. On Friday snow and sleet fell in Great Britain, and at night there was sharp frost in many places. A very perfect lunar halo was seen on Friday evening. In Dublin the barometer ranged between 30.128 inches at 9 a.m. of Tuesday (wind, S.W.), and 29.461 inches at 9 a.m. of Friday (wind, N.W.). On Tuesday the screened thermometers rose to 59.0°; on Saturday they fell to 31.1°. The rainfall was .408 inch on five days, .213 inch being measured on Thursday. The prevailing winds were W. and N.W. Sleet and hail fell on Wednesday, the 2nd.

While changeable, the weather of the week ended Saturday, the 12th, was in most respects favourable. The first two days were cold, with strong W.N.W. winds and showers of sleety rain and hail at times. At this time the centre of a depression of some depth (29.20 inches) lay between Scotland and Norway, drawing strong, cold N.W. winds in from the Atlantic. The next three days were chiefly fine and mild, with S.W. winds on Wednesday and Thursday. On the night of the latter-named day, a fresh gale from the south-westward was felt in the N.W. of Ireland and also in the E. of Scotland. The wind was gusty on nearly all coasts. There was not much rain, except at Belmullet in Mayo and Stornoway in the Hebrides. In Ireland the wind veered temporarily to W.N.W. on Friday, and a beautiful day was enjoyed. At night a fresh backing of the wind to S.W. in Ireland ushered in a new S.W. system, with squalls and a good deal of cloud. Saturday was a dry, searching, squally day. Rain fell in the evening. For the first time this winter severe and continuous cold held in Sweden and Lapland. At Haparanda, on the Gulf of Bothnia, the 8 a.m. temperatures were -13°, -8°, -24°, -22°, -28°, -11°, and +8° respectively. In Dublin the mean height of the barometer was 30.042 inches, pressure varying from 29.762 inches at 9 a.m. of Sunday (wind, W. by N.), to 30.280 inches at 9 p.m. of Friday (wind, W.). The mean temperature was 45.1°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 43.2°. The screened thermometers fell to 35.9° on Monday, and rose to 53.7° on Thursday. Rain fell on three days to the amount of .706 inch, .089 inch being measured on Sunday. The prevailing winds were W.N.W. and S.W.

Changeable, but reasonable, weather prevailed during the week ended Saturday, the 19th. An area of high barometer (anticyclone) was generally found lying over the Bay of Biscay, France, and the Peninsula; while (as in past weeks) cyclonic conditions ruled in the British Islands and Scandinavia. Hence came a prevalence of strong and squally westerly winds, with open, showery, or at times rainy weather. At 8 a.m. of Wednesday the barometer read only 28.75 inches at Christiansund, on the west coast of Norway, but stood as high as 30.53 inches at Lyons. Strong westerly gales were felt on Tuesday afternoon over Scotland and the North of Ireland, and these

were followed by equally strong north-westerly gales on Wednesday forenoon. As the deep depression referred to travelled away to the eastward, the weather improved and the wind moderated. On Thursday afternoon, however, the distribution of pressure became complex, owing to the formation of secondary depressions over the British area. One of these caused an easterly breeze and heavy rainfall in the Dublin district on Thursday night and Friday forenoon. The weather then cleared temporarily, and became cold, only to fall into an unsettled state once more on Saturday afternoon and during the ensuing night. In Dublin the mean height of the barometer was 30.038 inches, pressure varying between 30.257 inches at 9 p.m. of Wednesday (wind, W. by N.) and 29.619 inches at 9 p.m. of Saturday (wind, W.N.W.). The mean temperature was 44° . The mean dry bulb temperature at 9 a.m. and 9 p.m. was 44° . On Tuesday the screened thermometers rose to 53° , on Saturday they fell to 32° . The rainfall was 7.17 inch on four days, .776 inch being measured on Thursday. Westerly winds again predominated.

The week ended Saturday, the 26th, was the coldest week of the present winter. In Dublin frost occurred under cover (in the thermometer screen) on five nights, and on the grass nightly. The cold weather of the earlier part of the period was brought about by the passage southwards across Western Europe of a deep atmospheric depression between Sunday and Thursday. At 8 a.m. of Sunday the centre of this system was a little to the eastward of the Shetland Isles, and the barometer read only 28.76 inches at Sumburgh Head. All that day the barometer fell in England and Ireland as the system moved southwards, and cold W. winds, with showers of sleet, snow and snow became general. By 8 a.m. of Monday the centre had reached St. George's Channel. The depression had begun to fill up, for the lowest pressure was now 29 inches (at Roche's Point, Cork). The centre lay over Brittany on Tuesday morning, had reached Bordeaux on Wednesday morning, and the Riviera on Tuesday morning. Up to this time very cold weather held in the British Isles, the snowstorm on Monday and Tuesday being particularly severe over the S.W. of England. On Friday a new depression edged in from the Atlantic, moving north-eastwards and spreading eastwards. It caused high temperature for a short time, followed by heavy rain. This was in turn succeeded by clear and cold weather. In Dublin the mean height of the barometer was 29.738 inches, the observed range being from 29.079 inches at 7.15 a.m. of Monday (wind, E.) to 30.171 inches at 9 a.m. of Thursday (wind, W.). The mean temperature was 38° . The mean dry bulb temperature at 9 a.m. and 9 p.m. was 35° . On Thursday the screened thermometers sank to 28° ; on Friday they rose 51° . Rain fell on five days to the amount of 3.34 inch, .204 inch being measured on Friday. The prevailing wind was N.W. Snow or hail fell on each of the first three days.

The last two days were changeable and rather cold, with westerly winds. In Dublin the rainfall up to February 28th, 1898, amounted to 3.529 inches on 32 days, compared with 4.049 inches on 33 days in 1897, only 1.583 inches on 24 days in 1896, 6.836 inches on 33 days. In 1895, 7.14 inch on 16 days in 1891, and a twenty-five years' (1865-1899) average of 4.350 inches on 34.3 days.

At Knockdolian, Greystones, Co. Wicklow, 1.633 inches of rain fell in February on 16 days. The heaviest fall in 24 hours was 4.25 inch on the 17th. The total fall to February 28th inclusive was 3.980 inches on 29 days, compared with 5.190 inches on 37 days in 1897, and only 1.940 inches on but 17 days in 1896.

The rainfall in February at Clonsilla, Killiney, Co. Dublin, amounted to 1.74 inches on 16 days. The average rainfall for February during 12 years (1885-96) at this station is 1.461 inches on 12.5 days. The greatest rainfall in 24 hours was .58 inch on the 17th. Snow fell on the 20th and 21st. Since January 1, the rainfall was 3.32 inches on 29 days, compared with 4.31 inches on 38 days, in 1897, and 1.64 inches on 10 days in 1896.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, rain fell on 18 days in February, the total measurement being 1.607 inches. The corresponding figures for February, 1897, were 1.718 inches on 15 days. On the 25th, .332 inch was registered. At this climatological station the lowest temperature in the screen was 27° on the 21st, the highest was 57° on the 1st. Since January 1 the rainfall has been 3.928 inches on 27 days.

MARCH.—March proved the coldest month of the winter of 1897-98. Nevertheless, its mean temperature was only fractionally below the average— 0.4° . This result was brought about by the occurrence of a warm spell from the 15th to the 19th, inclusive. After the 33rd very cold weather held to the end of the month, a bitter N.E. gale blowing on the 24th and 25th. Snow or sleet fell in Dublin on 9 days, hail on 8 days.

In Dublin the arithmetical mean temperature (42.7°) was somewhat below the average (43.1°); the mean dry-bulb readings at 9 a.m. and 9 p.m. were 41.4° . In the thirty-two years ending with 1897, March was coldest in 1867 and 1883 (M.T. = 39°), and warmest in 1893 (M.T. = 46.1°) and in 1868 (M.T. = 47.3°).

The mean height of the barometer was 29.969 inches, or 0.053 inch above the corrected average value for March—namely, 29.916 inches. The mercury rose to 30.330 inches at 9 a.m. of the 25th, and fell to 29.426 inches at 9 p.m. of the 29th. The observed range of atmospheric pressure was, therefore, .904 inch.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 41.4° . Using the formula, Mean Temp. = $\frac{M + (max - min \times .85)}{2}$, the M.T. becomes 42.5° . The arithmetical mean of the maximal and minimal readings was 42.7° , compared with a twenty-five years' average of 43.1° . On the 18th the thermometer in the screen rose to 59.8° —wind, W.S.W.; on the 5th the temperature fell to 39.8° —wind, W.S.W. The minimum on the grass was 28.5° , also on the 5th.

The rainfall was 1.041 inches, distributed over 16 days. The average rainfall for March in the twenty-five years, 1865-89, inclusive, was 2.061 inches, and the average number of rainy days

was 16°. The rainfall, therefore, and also the rainy days, were below the average. In 1867 the rainfall in March was very large—4·972 inches on 22 days. On the other hand, the smallest March rainfall was 288 inch on 8 days in 1893.

The atmosphere was more or less foggy in the city on 5 days—viz, the 7th, 8th, 11th, 30th, and 31st. High winds were noted on 11 days, reaching the force of a gale on two occasions—the 24th and 25th. Snow or sleet occurred on the 1st, 2nd, 5th, 7th, 24th, 25th, 26th, 27th, and 28th; and hail fell on the 1st, 4th, 7th, 24th, 25th, 26th, 27th, and 28th. The temperature exceeded 30° in the screen on 9 days, compared with 14 days in 1897, 21 in 1896, 13 in 1895, 22 in 1894, 26 in 1893, only 7 in 1892, 9 in 1891, and 19 in 1890. It fell to or below 32° in the screen on five occasions. The minima on the grass were 32°, or less, on 15 nights, compared with 9 nights in 1897, 8 in 1896, 10 in 1895, 12 each in 1894 and 1893, 25 in 1892, 30 in 1891, and 16 in 1890. The thermometer never rose to 60° in the screen, and never failed to each 40°. A solar halo was seen on the 22nd. Lunar halos appeared on the 1st and 3rd. There was a brilliant aurora borealis on the evening of the 14th.

A continuance of cold and wintery weather signalled the period ended Saturday, the 5th. Prior to Thursday a depression of some depth travelled gradually south-eastwards to Central Europe from the Norwegian Sea. It brought to the British Isles fresh to strong westerly and afterwards northerly winds and cold showers. Hail, sleet, and snow became prevalent on and after Tuesday, the 1st, and thunder and lightning were reported from various stations—from Holyhead on Wednesday, and Scilly and Pwllheli Point on Thursday. In the course of the last-named day a secondary depression formed over the S.W. of England, and subsequently travelled southwards to the S.W. of France. This system caused falls of cold rain and wet snow in the S. England and parts of France—the heaviest down-pour being in London (35 inch). On Thursday and Friday the eastern quadrant of an anticyclone spread over Ireland from the Atlantic, and northerly winds and cold weather prevailed. On Saturday the barometer fell steadily as a new depression approached from the N.W. This system caused a shift of wind to S.W. and S., clouds and a fall of wet snow in the afternoon. In Dublin the barometer fell to 29·638 inches at 9 p.m. of Saturday (wind, W.) after having risen to 30·061 inches at 9 p.m. of Friday (wind, N.). On Wednesday the screened thermometers rose to 46·6°, on Saturday they fell to 30·8°. The rainfall was 164 inch on four days, 494 inch being measured on Tuesday. Hail fell on Tuesday and Friday, snow or sleet on Tuesday, Wednesday, and Saturday.

The cold weather drew to a close in Ireland on Thursday, the 16th, and the last three days of the week ended Saturday, the 12th, were comparatively genial. In England, however, sharp night frosts were felt at the inland stations almost to the end of the week—a minimum of 23° in the shade being recorded at Loughborough on Friday morning. On Sunday a depression passed southwards across Ireland, where cold showers were prevalent. Sleet and soft hail fell on Monday morning, but the day finally proved brilliant, although the air was very keen. At 8 p.m. of Tuesday the barometer stood as high as 31·14 inches at Moscow. A band of high atmospheric pressure now moved southwards across the British Islands, so that quiet, calm, cold weather prevailed. As the ridge of high pressure passed by, westerly winds sprang up, accompanied by cloudy skies and a much higher temperature. This change first affected the North of Ireland and Scotland, and later on extended to the South of Ireland and parts of England. On Saturday there were a few light showers. In Dublin the mean height of the barometer was 30·129 inches, pressure ranging between 29·633 inches at 9 a.m. of Sunday (wind, W.N.W.) and 30·303 inches at 9 a.m. of Thursday (wind, N.W.). The corrected mean temperature was 42·6°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 40·7°. The screened thermometers fell to 31·1° on Tuesday, and rose to 53·5° on Friday. Rain fell in measurable amount on two days, the total fall being 0·44 inch, of which 0·33 inch was registered on Sunday. North-westerly winds predominated.

The westerly type of weather held throughout the week ended Saturday, the 19th, which was much milder and also duller than its immediate predecessors. The barometer ruled low to the northward of Scotland, while it was relatively high over the Bay of Biscay, France, and the southern parts of the British Isles. On Sunday night a subsidiary depression passed eastwards across Ireland. On Tuesday morning another and deeper depression arrived off the Hebrides, causing squally weather and some rainfall. On the evening of this day brilliant aurora borealis was seen in the British Islands and Denmark. The next three days were cloudy, mild, and squally—the wind being S.W. or W. in direction. Very little rain fell except in the far North. Finally, on Friday night a V-shaped or angular depression caused broken weather for the time being. Saturday was much cooler and fine throughout—the upper clouds still travelling from W.S.W., while the lower clouds and wind came from N. In Dublin the mean height of the barometer was 29·926 inches, pressure ranging between 29·706 inches at 9 a.m. of Friday (wind, W.S.W.) and 30·121 inches at 9 p.m. of Saturday (wind, N.). The corrected mean temperature was 48·3°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 47·4°. On Friday the screened thermometers rose to 59·3°, having fallen to 35·7° on Sunday. The rainfall was 1·80 inch on three days, 1·56 inch being measured on Friday. The prevailing wind was W.S.W. The aurora borealis on Tuesday evening was a very splendid display.

Cold throughout the week ended Saturday, the 26th, the weather became extremely severe and inclement on Wednesday, and so continued to the end of the period. During the first three days an anticyclone lay over the British Islands, the weather was fine and quiet, and the diurnal range of temperature was very large, sharp night frosts being followed by spells of warm sunshine by day. At Cambridge the thermometer rose to 51° in the shade on Sunday, and to 54° on Monday, the night minima being 25° and 26° respectively. On Tuesday the barometer fell in Scotland and Ireland, and the wind shifted to S.W., as a depression advanced to our neighbourhood from the northward. By 8 a.m. of Wednesday the centre of this system had reached the Wash, whence it travelled to Central Europe, growing deeper as it moved. Simultaneously the barometer rose quickly in the N., N.W., and W., with the result that baric gradients became very steep for

north-easterly and north-westerly winds. Strong gales and blinding showers of hail, sleet and snow were reported during the last three days of the week from all exposed points on the British coasts, the S.E. of England suffering most severely. Ireland for the most part escaped the blizzard, but the east coast from Dublin southwards felt the fury of the gale, and was swept by snow and hail squalls from time to time. A fresh decrease of pressure began on Friday, continuing to the end of the week. In Dublin the mean atmospheric pressure was 30.169 inches, the barometer ranging between 30.339 inches at 9 a.m. of Friday (wind, N.E.) and 29.823 inches at 9 p.m. of Saturday (wind also N.E.). The corrected mean temperature was 41.6°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 41.0°. On Wednesday the screened thermometers rose to 52.8°; on Monday they fell to 31.9°. The prevailing winds were N.W. and N.E. The rainfall was 132 inch on three days, 101 inch being measured on Saturday. The precipitation was chiefly in the form of snow, sleet, and hail.

Although still cold for the time of year, the weather moderated in the closing period of the month (27th-31st). On Sunday, the 27th, a large and rather deep depression still lay over France and Germany, while an anticyclone was found covering the Gulf of Bothnia. At 8 a.m. the barometer was as low as 29.39 inches in France, whereas it stood at 30.61 inches at Harnosand in Sweden. Strong N.E. winds, dull, cold weather, and rain, hail, and sleet were prevalent in most parts of the British Islands. The west and south of Ireland, however, enjoyed fine weather. Late on Tuesday night, cold rain, sleet, and hail fell heavily in Dublin. Gradients became much less steep after Sunday, so that the N.E. winds died down—on Tuesday, indeed, there was a light S.W. breeze for a time. Rain continued to fall in and near Dublin until the afternoon of the 30th, when a dry spell set in. The rainfall was 321 inch. The barometer ranged from 29.428 inches at 9 p.m. of Tuesday, the 29th (wind, W.), to 29.916 inches at 9 p.m. of Thursday, the 31st (wind calm). The extremes of temperature both occurred on the latter day—the maximum being 47.6°, the minimum 34.1°. North-westerly winds prevailed.

The rainfall in Dublin during the three months ending March 31st amounted to 4.579 inches on 48 days, compared with 7.669 inches on 57 days in 1897, 4.893 inches on 47 days in 1896, 9.064 inches on 52 days in 1895, 6.028 inches on 53 days in 1894, 5.196 inches on 49 days in 1893, 4.903 inches on 48 days in 1892, only 1.630 inches on but 32 days in 1891, 7.479 inches on 45 days in 1890, and a twenty-five years' average of 6.411 inches on 61.0 days (1865-1889, inclusive).

At Knockdolia, Greystones, Co. Wicklow, only 765 inch of rain fell on 12 days during March; and the total rainfall since January 1, 1893, equals 4.745 inches on 61 days. The corresponding figures for 1897 are 3.755 inches on 24 days, the total rainfall since January 1 having been 8.945 inches on 61 days. The maximal fall in 24 hours was 1.80 inch on the 26th.

The rainfall in March at Clonsilla, Killybeg, Co. Dublin, was 1.29 inches on 15 days, compared with 3.28 inches on 23 days in 1897, 2.61 inches on 23 days in 1896, 3.29 inches on 21 days in 1895, 1.11 inches on 14 days in 1894, .25 inch on 9 days in 1893, .98 inch on 10 days in 1892, and a twelve years' (1885-96) average of 1.873 inches on 15.3 days. The maximum in the 12 years was 3.59 inches in 1888; the minimum was .26 inch in 1893. At this station the total rainfall since January 1 was 4.61 inches on 44 days, compared with a fall of 7.59 inches on 61 days in the first quarter of 1897. On the 28th, 23 inch fell.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall in March was 8.44 inch on 13 days, compared with 4.490 inches on 23 days in 1897, 1.48 inch being registered on the 6th. The highest shade temperature at this climatological station was 59.0°, on the 18th; the lowest was 31.2°, on the 9th. Since January 1, 4.767 inches of rain had fallen at the hospital on 40 days, compared with 10.086 inches on 57 days in the first quarter of 1897.

April.—A mild, genial, spring month, very favourable to vegetation. The heavy rains which fell on the 11th, 23rd, and 30th, made up 75 per cent. of the total precipitation of the month—2.063 inches out of 2.666 inches. A remarkable and sudden increase of temperature occurred between the 5th and 6th. At the close many forest trees were in full leaf.

In Dublin the arithmetical mean temperature (49.7°) was 2.0° above the average (47.7°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 49.7°. In the thirty-three years ending with 1897, April was coldest in 1879 (the cold year) (M. T.=44.5°), and warmest in 1890 (M. T.=51.4°). The month of April, 1893, was the warmest for at least 30 years.

The mean height of the barometer was 29.828 inches, or 0.022 inch below the average value for April—namely, 29.850 inches. The mercury rose to 30.197 inches at 9 p.m. of the 24th, and fell to 29.223 inches at 3 p.m. of the 30th. The observed range of atmospheric pressure was, therefore, not quite one inch—namely, .977 inch.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 45.7°, or 7.8° above the value for March, 1893. Using the formula, Mean Temp. = $M_{9a} + (max. - min. \times .476)$, the value is 49.4°, or 2.0° above the average mean temperature for April, calculated in the same way, in the twenty-five years, 1863-89, inclusive (47.4°). The arithmetical mean of the maximal and minimal readings was 49.7°, compared with a twenty-five years' (1865-1889 inclusive) average of 47.7°. On the 7th the thermometer in the screen rose to 64.7°—wind, S.S.W.; on the 5th the temperature fell to 33.4°—wind, S.S.E. The minimum on the grass was 29.7°, also on the 5th.

The rainfall was 2.666 inches, distributed over 16 days. The average rainfall for April in the twenty-five years, 1865-89, inclusive, was 2.055 inches, and the average number of rainy days was 15.2. The rainfall and the rainy days, therefore, were above the average. In 1877 the rainfall in April was very large—4.707 inches on 21 days; in 1882 also, 3.326 inches fell on 20 days, and in 1894, 3.128 inches on 20 days. On the other hand, in 1873, only .498 inch was measured on 8 days; in 1870, only .838 inch fell, also on 8 days; and in 1896, only .883 inch on 16 days.

Fog was observed on the 5th, 18th, 22nd, 24th, and 25th. High winds were noted on 8 days, reaching the force of a gale on the 10th and 30th. Hail fell on the 10th. The temperature rose to or above 60° in the screen on 6 days. It only once failed to reach 50° (on the 30th). It never fell to 32° in the screen, and on only 2 nights did it fall below 32° on the grass. The mean lowest temperature on the grass was 40·2°, compared with 37·7° in 1897, 40·0° in 1896, 37·8° in 1895, 40·6° in 1894, 38·2° in 1893, 32·4° in 1892, 34·1° in 1891 and 1890, 34·4° in 1889, 34·6° in 1888, and 31·6° in 1887. Solar halos were seen on the 7th, 8th, 9th, and 25th, a lunar halo on the 1st.

The month opened with very favourable weather. The nights were sharp, but the thermometer rose in the shade to 53·6 on Friday, the 1st, and to 52·7° on Saturday, the 2nd. On the last-named day a new depression was approaching the N W of Ireland from the Atlantic.

The most remarkable feature in the weather of the week ended Saturday, the 9th, was the sudden bound into summer from winter, which occurred on Wednesday, the 6th. At the beginning fresh westerly winds were blowing, accompanied by showers. At 8 a.m. of Monday, a deep V-shaped subsidiary depression lay off the S W coast of Norway, and northerly winds were blowing over the British Islands. The sky was clear and the air was keen, although hot sunbaths prevailed. Sleet fell in Scotland, hail showers in the North of England. An area of high atmospheric pressure passed eastward across Ireland and England in the rear of the above-mentioned depression, with the result that a decided "chill" occurred in these countries on Monday night, the thermometer falling in the shade to 28° at Parnestown, 33° in Dublin, 32° in London, 27° at Oxford, 23° at Cambridge, and 24° at Loughborough. The wind now shifted to S S E in Ireland and a sudden rise of temperature took place, so that on Wednesday the thermometer reached 63·1° in the screen in Dublin—the highest since September 28th, 1897. On Thursday the maximum was 64·7°, and on Friday, it was 63·6°. A depression on the night of the last-named day was followed by showers, westerly winds, and a lower temperature on Saturday. Solar halos were seen on each of the last three days. The mean height of barometer was 29·904 inches, pressure varying from 30·125 inches at 9 a.m. of Tuesday (wind, S S E) to 29·606 inches at 7·15 a.m. of Saturday (wind, W). The corrected mean temperature was 51·0°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 50·3°. The screened thermometers fell to 33·4° on Tuesday, and rose to 64·7° on Thursday. The air was particularly dry on Good Friday. Rain fell on three days to the amount of 1·03 inch, 0·73 inch being measured on Saturday.

The weather of the week ended Saturday, the 16th, was of a distinctly changeable and unsettled type, but in the main favourable to both health and vegetation. Easter Day was very unsettled. Strong, squally S W winds and heavy showers of rain and hail prevailed in Ireland and parts of Great Britain, thunder and lightning being reported from Valencia Island and from Dublin, thunder only from York, and lightning from Yarmouth. These electrical disturbances were connected with a subsidiary depression which reached Denmark on Monday morning. Another subsidiary appeared off the South of Ireland at noon of Easter Monday, thence travelling eastward across England. It caused very wet, dull weather—37 inch of rain being measured at York, 7·6 inch at Liverpool, 8·3 inch at Roche's Point, 48 inch at Loughborough, and 44 inch in Dublin. On Tuesday night a large primary depression passed northwards over the West of Ireland, giving a rainfall of one inch to Valencia and of half an inch to Parnestown. The weather now became fair and bright, though at times showery, in Ireland, while a V-shaped depression passing across England produced wet weather in England on Thursday. On Friday heavy showers of rain and hail fell to the S.E. of Dublin, but the weather remained very fine and dry in the city itself. Thunder and lightning occurred at Roche's Point, Cork, and in central England in the course of the day. Saturday also was most favourable. In Dublin the mean atmospheric pressure was 29·724 inches, the barometer falling to 29·364 inches at 2·30 p.m. of Sunday (wind, W S W) and rising to 30·003 inches, at 9 a.m. of Saturday (wind, W). The corrected mean temperature was 49·6°. The mean dry bulb temperature at 9 a.m. and 9 p.m. was 48·2°. On Sunday the shade thermometers registered 60·6°, on Tuesday they fell to 37·8°. The rainfall was ·665 inch on four days, ·439 inch being registered on Monday. The prevailing winds were westerly (S.W. to N.W.).

Changeable, but generally favourable, weather prevailed during the week ended Saturday, the 23rd. Curious troughs of relatively low atmospheric pressure advanced eastwards across Ireland on the nights of Sunday and Tuesday. But these V-shaped depressions filled up or dispersed when they reached Great Britain, after causing heavy rains in most parts of Ireland. The east coast near Dublin, however, received only moderate showers, which hastened spring vegetation in a wonderful way. The modification observed in the low pressure systems seemed to be caused by the persistent presence of an anticyclone over the extreme North of Europe, where also winter lingered—at Haparanda, on the Gulf of Bothnia, the night minima were 9°, 10°, 7°, 20°, 12°, 18°, and 10°, respectively—sufficiently low temperatures for the second half of April. The diurnal range of temperature at inland stations even in the British Isles was at times large—on Thursday night the thermometer fell to 48° at Parnestown, and 30° at Ousebridge from maxima of 67° and 69° respectively. In Dublin the mean height of the barometer was 29·932 inches, pressure ranging from 29·591 inches at 9 a.m. of Monday (wind, S.S.E.) to 30·185 inches at 9 a.m. of Thursday (wind, N.N.W.). The corrected mean temperature was 50·2°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 49·2°. On Wednesday the screened thermometers rose to 60·6°, on Friday they fell to 41·5°. Rain fell on five days to the amount of 7·87 inch, 0·83 inch being measured on Monday and as much as 6·08 inch on Saturday. The wind was variable and light except on Sunday night and Monday forenoon, when it blew freshly from S S E.

In the week ended the 30th unfavourable but not settled weather prevailed until Saturday, when there was a violent rainstorm. On and after Tuesday rain fell copiously in Great Britain, and on Saturday there was a heavy downpour in Ireland. Throughout the period an anticyclone was found over Scandinavia. On Monday and Tuesday this high pressure system spread south-westwards across the British Isles, and fine but cool and somewhat foggy or cloudy weather

prevailed. Throughout the greater part of Monday a well-defined solar halo was visible. On Tuesday morning a large though shallow area of low atmospheric pressure appeared over the Bay of Biscay and Central France. This system moved northwards to the South of England, growing deeper as it advanced. It led to a thunderstorm in Kent and to plentiful rainfalls in the S. and E. of England, and later on in Scotland also. On Friday morning a still larger and deeper depression appeared off the S.W. of Ireland, in which country rain began to fall. Saturday was very inclement, and a severe rainstorm occurred in the Dublin district, 9.29 inch falling between 9 a.m. and 4 p.m. The wind was first E.S.E., then N.E., N., and finally W. on that day. In Dublin the mean height of the barometer was 29.736 inches, pressure rising to 30.197 inches at 9 p.m. of Sunday (wind, calm) and falling to 29.220 inches about 3 p.m. of Saturday (wind, W.). The corrected mean temperature was 48.4°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 47.9°. On Monday the screened thermometers fell to 38.7°, on Thursday they rose to 57.7°. Rain fell on three days to the amount of 1.089 inches, 9.66 inch being measured on Saturday. E and S.E. winds prevailed.

The rainfall in Dublin during the four months ending April 30th amounted to 7.236 inches on 64 days, compared with 9.654 inches on 79 days, in 1897, 5.781 inches on 63 days in 1896, 10.253 inches on 65 days in 1895, 9.151 inches on 78 days in 1894, 6.242 inches on 56 days in 1893, 9.922 inches on 61 days in 1892, only 3.203 inches on 48 days in 1891, and a twenty-five years' average of 8.466 inches on 69.2 days.

At Kaeokdolan, Greystones, Co. Wicklow, the rainfall amounted to 4.145 inches on 15 days. The heaviest falls in 24 hours were 7.60 inch on the 30th, and .699 inch on the 11th. The total rainfall in 1898, up to April 30th, was 8.899 inches on 56 days, compared with 13.660 inches on 80 days in 1897, 5.696 inches on 50 days in 1896, 12.570 inches on 54 days in 1895, 12.456 inches on 70 days in 1894, and 8.539 inches on 54 days in 1893.

At Clonsavin, Killiney, Co. Dublin, 3.18 inches of rain fell on 17 days. The maximal fall in 24 hours was 1.04 inches on the 30th. The average rainfall in April of the twelve years, 1885-96, was 1.648 inches on 13.2 days. Since January 1, 1898, 7.74 inches of rain fell at this station on 61 days, compared with 10.96 inches on 83 days, in 1897, 5.27 inches on 45 days in 1896, 11.28 inches on 66 days in 1895, 9.09 inches on 74 days in 1894, and 6.94 inches on 57 days in 1893.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall was 4.641 inches on 15 days, compared with 3.466 inches on 19 days in April, 1897. On the 11th, .582 inch was measured; on the 23rd, .630 inch; and on the 30th, 1.270 inches. The maximal temperature in the shade was 61.0° on the 7th. The minimal temperature in the screen was 32.8° on the 5th. At this climatological station, 9.208 inches of rain fell on 55 days up to April 30th, 1898, compared with 13.492 inches on 76 days in the first four months of 1897.

MAY.—Like May, 1897, in the matter of temperature, May, 1898, proved very unlike that month in the matter of cloud, rainfall, and rainy days. It may be described as a cloudy, rainy, or showery, cold month. In May, 1897, the rainfall amounted to only 36 per cent. of the average, in May, 1898, it was 164 per cent. There was a remarkable preponderance of winds from polar points of the compass.

In Dublin the arithmetical mean temperature (51.2°) was decidedly below the average (52.0°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 50.6°. In the thirty-three years ending with 1897, May was coldest in 1899 (M. T. = 48.2°), and warmest in 1893 (M. T. = 56.7°). In 1896 the M. T. was 55.8°; and in 1897, 50.9°.

The mean height of the barometer was 29.854 inches, or 0.135 inch below the corrected average value for May—namely, 29.989 inches. The mercury rose to 30.316 inches at 9 p.m. of the 6th, and fell to 29.106 inches at 9 a.m. of the 3rd. The observed range of atmospheric pressure was, therefore, 1.210 inches.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 50.6°, or 1.5° above the value for April, 1898, 48.7°. Using the formula, Mean Temp. = $\frac{M + N}{2} + (\text{max.} - \text{min.} \times .47)$, the value was 50.8°, or 0.8° below the average mean temperature for May, calculated in the same way, in the twenty-five years, 1865-89, inclusive (51.6°). The arithmetical mean of the maximal and minimal readings was 51.2°, compared with a twenty-five years' average of 52.0°. On the 8th the thermometer in the screen rose to 63.7°—wind, W. It reached the same height on the 25th—wind, N.E. On the 16th the temperature fell to 36.0°—wind, W. The minimum on the grass was 33.0°, also on the 16th.

The rainfall amounted to 3.832 inches, distributed over 20 days. The average rainfall for May in the twenty-five years, 1865-89, inclusive, was 2.030 inches, and the average number of rainy days was 15.4. The rainfall and the rainy days were thus much above the average. In 1898 the rainfall in May was very large—5.472 inches on 21 days; in 1893, also, 5.414 inches fell on 19 days. On the other hand, in 1895, only 1.77 inch was measured on but 3 days. In 1896 the fall was only .190 inch on 7 days. In 1897 1.139 inches fell on 14 days.

A lunar halo was seen on the 4th, solar halos appeared on the 8th and 11th. High winds were noted on 9 days, but did not attain the force of a gale on any occasion. The atmosphere was slightly foggy on the 7th. Hail fell on the 12th, 13th, 16th, 17th, and 31st. Thunder and lightning occurred on the evening of the 23rd.

During the month the thermometer did not fall below 32° in the screen or on the grass. The mean minimal temperature on the grass was 42.9°, compared with 40.9° in 1897; 43.1° in 1896, 41.8° in 1895, 37.6° in 1894, 45.6° in 1893, 41.3° in 1892, 37.7° in 1891, 42.2° in 1890, 42.4° in 1889, 37.5° in 1888, and 37.9° in 1887. The maximum exceeded 60° on 8 days, but fell short of 50° on one day—the 2nd.

Very changeable weather prevailed during the greater part of the week ended Saturday, the 7th. Thursday and Friday, however, were very fine in Dublin. On Sunday heavy showers fell between 11 a.m. and 4 p.m. A still heavier downpour of rain occurred on Monday afternoon, when a deep

depression passed slowly northwards across Ireland. This system attained its greatest intensity on Tuesday morning. At 8 a.m. the barometer was down to 29.03 inches at Valentia and 29.04 inches at Portmarnock. On Wednesday the centre of this depression was found off the W. of Scotland, whence a V-shaped trough of low pressure stretched north-eastwards across Great Britain to the Straits of Dover. The weather now improved in Ireland but became rainy in England, particularly on Thursday, when a secondary depression passed eastwards from the S. of Ireland across England to Holland. On Friday a ridge of high pressure appeared over Ireland, but the barometer soon gave way again, though slowly, and a further copious downpour of rain occurred on Saturday afternoon. Mention should be made of a destructive thunder and hail storm which visited Plymouth on Monday forenoon. In Dublin the mean height of the barometer was 29.724 inches, pressure ranging from 29.166 inches at 9 a.m. of Tuesday (wind, S.S.E.) to 30.316 inches at 9 p.m. of Friday (wind, S.E.). The corrected mean temperature was 49.6°. The mean dry-bulb temperature at 9 a.m. and 9 p.m. was 50.1°. The screened thermometers fell to 49.6° on Friday, and rose to 60.7° on Saturday. Rain fell on five days to the amount of 1.408 inches, .069 inch being measured on Monday and .516 inch on Saturday. The prevalent wind was S.S.E.

The week ended Saturday, the 14th, was another period of changeable, showery weather. The periodic cold spell of the second week in May was particularly well marked, beginning on Wednesday and lasting to the end of the week. Atmospheric pressure was tolerably high at first, but subsequently depression after depression arrived from the Atlantic, so that the barometer fell first all over Scandinavia and the British Isles. The climax was reached on Thursday morning, when the barometer read only 28.38 inches at Christiansund in Norway. In the rear of this primary disturbance (which finally passed away to the north-west) various secondary depressions continued to cross the British Islands up to and including Friday. Squalls, with heavy showers of rain and hail, and in some places thunder, were prevalent—the storms of Thursday and Friday being particularly severe. In Dublin the weather was fairly warm until Wednesday, but after that it was more like winter than late spring. On Saturday a sudden change for the better occurred, the wind shifting to N.E. and E., the sky clearing and temperature rising. In Dublin the mean atmospheric pressure was 29.701 inches, and the barometer ranged from 30.111 inches at 9 p.m. of Sunday (wind, W.N.W.) to 29.126 inches at 3.30 p.m. of Wednesday (wind, N.W.). The corrected mean temperature was 49.8°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 49.1°. The screened thermometer rose to 63.7° on Sunday, and fell to 38.3° on Friday. Rain fell on five days to the amount of .668 inch, the heaviest downpour in 24 hours being .570 inch on Friday. Westerly to north-westerly and northerly winds prevailed.

The most remarkable feature about the week ended Saturday, the 21st, was the prevalence of broken, dull, cold and rainy weather in France and England, whereas finer, brighter weather ruled in Scotland and throughout the greater part of Ireland. The east coast of this country, however, came in for a good deal of rain and equally N. and N.E. winds. On Sunday morning depressions were found off the North of Scotland and over the English Channel—northerly winds and fair, cold weather prevailed in Ireland. By Tuesday morning another shallow depression had advanced to the North of Ireland and West of Scotland. It caused cold, showery weather. As the day wore on this system dispersed, and an anticyclone began to form over Norway, Scotland, and Ireland. Meanwhile a new and large depression appeared over Italy, whence it moved slowly north-westwards towards England and the Netherlands. As it travelled it caused ever freshening N.E. winds, dull, cold, and very rainy weather. These unsettled conditions did not reach the W. and N.W. of Ireland until Saturday night when rain fell generally in considerable quantities. In Dublin the mean height of the barometer was 30.082 inches, pressure ranging between 29.233 inches at 9 p.m. of Wednesday (wind, N.E.) and 29.810 inches at 9 p.m. of Saturday (wind, N.E.). The corrected mean temperature was 49.9°. The mean dry bulb reading was 49.3°. On Monday the screened thermometers sank to 36.0°, on Friday they rose to 63.6°. Rain fell on four days to the amount of .749 inch, of which .331 inch was measured on Saturday and .248 inch on Tuesday. The prevailing winds were at first W., afterwards N.E. Hail showers fell in Dublin on Monday and Tuesday.

Very favourable, yet generally unseasonal weather prevailed throughout the week ended Saturday, the 28th. On Sunday, Monday, and Tuesday, however, there were electrical disturbances in many parts of England and Ireland, and on Monday evening thunder and lightning occurred near Dublin, while there was a thunderstorm at Roche's Point, Cork Harbour, on Wednesday evening. These electrical manifestations were connected with a large though shallow depression, which had travelled from Italy to the British Islands during the previous week. From Monday onwards another low pressure system was observed over Denmark and Norway. It caused cool northerly winds and low temperatures, but the rainfall which accompanied it was not as a rule large. During the last three days conditions were distinctly anticyclonic in Ireland, to the westward of which country the barometer ruled high. The amount of cloud was particularly large for May, except on Tuesday afternoon and throughout Wednesday. In Dublin the mean height of the barometer was 29.892 inches, pressure ranging between 29.736 inches at 9 p.m. of Sunday (wind, E.) and 30.182 inches at 9 p.m. of Saturday (wind, N.W.). The corrected mean temperature was 53.2°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 52.7°. On Wednesday the screened thermometers rose to 63.7°, on Friday they fell to 39.2°. The rainfall was .687 inch on three days, .070 inch being measured on Monday. Easterly and then northerly winds prevailed.

The last three days were unsettled, cloudy, squally, and showery. There was moderate warmth on Sunday, the 29th, when the shade maximum was 60.7°, but temperature then fell away, and Tuesday, the 31st, was like a March day, hail falling in heavy showers from time to time.

The rainfall in Dublin during the five months ending May 31st amounted to 10.568 inches on 84 days, compared with 10.693 inches on 93 days in 1897, 5.971 inches on 70 days in 1896, 10.410 inches on 65 days in 1895, 12.769 inches on 90 days in 1894, 7.906 inches on 66 days in 1893

10·069 inches on 80 days in 1892, only 5·995 inches on 63 days in 1881, 11·483 inches on 76 days in 1890, and a twenty-five years' average of 10·496 inches on 81·6 days.

At Knockdoon, Creystones, Co. Wicklow, the rainfall was 3·555 inches, distributed over 22 days, 1·080 inches falling on the 2nd and 400 inch on the 7th. The total fall since January 1st, 1898, equals 12·445 inches on 78 days, compared with 14·120 inches on 90 days in 1897, 5·716 inches on 52 days in 1896, 12·845 inches on 58 days in 1895, 15·696 inches on 55 days in 1894, and 9·565 inches on 65 days in 1893.

The rainfall at Clonevin, Killiney, Co. Dublin, was 3·330 inches on 21 days, compared with 0·850 inch on 10 days in May, 1897—0·06 inch falling on the 7th. At this station the average rainfall in May in the twelve years, 1885-1896, was 2·061 inches on 13 days. May, 1896, was a very dry month, only 0·06 inch falling on 3 days. Since January 1, 1898, 11·07 inches of rain have fallen on 52 days at Clonevin. The corresponding figures in 1897 were 11·21 inches on 93 days.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall in May was 3·251 inches on 19 days, compared with 0·602 inch on 11 days in May, 1897. The maximal fall in 24 hours was 1·119 inches on the 2nd. Since January 1, 12·459 inches of rain have fallen at this station on 74 days. The maximum shade temperature was 64·0° on the 8th, the minimum was 35·2° on the 16th.

JUNE.—June, 1896, may be described as an average month. Atmospheric pressure, air temperature, and rainfall were all about the normal value. Like June, 1897, the month must be regarded as a favourable one, conducive to health and propitious to vegetation. It was, however, eminently changeable, and the fluctuations of temperature were abrupt and considerable.

In Dublin the arithmetical mean temperature (58·5°) was above the average (57·6°) by 0·9°; the mean dry bulb readings at 9 a.m. and 9 p.m. were 57·4°. In the thirty-three years ending with 1897, June was coldest in 1882 (M. T. = 55·8°); and in 1879 (the "cold year") (M. T. = 55·9°). It was warmest in 1887 (M. T. = 59·8°); in 1865 (M. T. = 61·0°); and in 1896 (M. T. = 61·4°).

The mean height of the barometer was 29·973 inches, or 0·056 inch above the corrected average value for June—namely, 29·917 inches. The mercury rose to 30·357 inches at 9 a.m. of the 14th, and fell to 29·430 inches at 7.30 a.m. of the 25th. The observed range of atmospheric pressure was, therefore, 1·027 inch.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 57·4°, or 6·8° above the value for May, 1898. Using the formula, *Mean Temp. = Min. + (max. - min. x .465)*, the value was 57·5°, or 0·3° above the average mean temperature for June, calculated in the same way, in the twenty-five years, 1865-89, inclusive (57·2°). The arithmetical mean of the maximal and minimal readings was 58·0°, compared with a twenty-five years' average of 57·8°. On the 17th the thermometer in the screen rose to 74·9°—wind, W.; on the 2nd the temperature fell to 41·8°—wind, N. The minimum on the grass was 39·9°, also on the 2nd.

The rainfall amounted to 1·547 inches, distributed over 14 days. The average rainfall for June in the twenty-five years, 1865-89, inclusive, was 1·617 inches, and the average number of rainy days was 13·6. The rainfall, therefore, was below, while the rainy days were equal to the average. In 1878 the rainfall in June was very large—5·058 inches on 19 days; in 1870, also, 4·046 inches fell on 24 days. On the other hand, in 1869, only 1·00 inch was measured on 6 days; in 1887, the rainfall was only 252 inch, distributed over only 5 days. In 1897, 3·257 inches fell on 20 days.

High winds were noted on 8 days, but the force of a gale was on no occasion attained. The atmosphere was more or less foggy on the 8th. Temperature reached or exceeded 70° in the screen on 4 days, compared with 17 days in 1897, only 1 day in 1888, and 6 days in 1897. A thunderstorm occurred on the 12th, and thunder was heard on the 26th. Hail fell on the 1st and 22nd.

Very unsettled, squally, cold, and showery weather characterised the period ending Saturday, the 4th. The showers were accompanied by thunder and lightning at many British stations on Wednesday, the 1st, and Thursday, the 2d. This last-named day proved unexpectedly fine and sunny in Ireland, a depression which had advanced from the N.W. having "turned tail" and retreated towards N. and N.W. along the coasts of Denmark and Norway. On Friday, however, a new low pressure area appeared to the northward of Ireland, and this brought about a renewal of unsettled weather. The wind at the same time backed towards S.W. and S., so that there was a distinct advance in temperature, and the period closed with a prospect of more summerlike weather. In Dublin the barometer ranged between 29·669 inches, at 9 p.m. of Wednesday, wind, N.W.; and 29·960 inches at 9 p.m. of Thursday (wind, N.W.). On Thursday the screened thermometers fell to 41·6°, on Saturday they rose to 61·8°. The rainfall was 1·87 inch on three days, 1·24 inch being measured on Saturday. N.W. to S.W. winds prevailed.

Commencing with gloomy, unsettled weather and heavy rains, the week ended Saturday, the 11th, proved fine and summerlike in Ireland and Scotland. In the S.E. of England, however, the weather was kept in an unsettled, dull, and rainy state until Friday by the approach of a shallow depression from the southward on Wednesday. On Sunday morning the barometer was low (29·54 inches at Valencia) off the S.W. of Ireland, southerly winds prevailed, accompanied by rain in many places. On Monday morning a Y-shaped depression lay over Ireland, where the weather remained in a broken, rainy condition, while thunder and lightning occurred very generally throughout England. A brisk increase of atmospheric pressure set in as the day advanced, so that by Tuesday morning baric gradients had become very slight over the British Islands, and there were signs of a change to finer and more summerlike conditions. At 8 a.m. of Wednesday a shallow depression was observed over the S.W. and centre of France, moving slowly north-eastwards. This system became stationary over Belgium on Thursday, and caused gloomy wet weather over the English Channel, the S.E. of England, the North of France, Belgium, and Germany. The rainfalls were very heavy in several places, 1·31 inches being registered at the North Foreland on Friday morning and 1·07

inches at Yarmouth. In Ireland beautiful, warm, and summerlike weather was enjoyed on and after Tuesday. In Dublin the mean atmospheric pressure was 30.014 inches, the barometer ranging from 29.555 inches at 9 a.m. of Monday (wind, S.) to 30.242 inches at 9 a.m. of Thursday (wind, calm). The corrected mean temperature was 57.7°. The mean dry-bulb reading at 9 a.m. and 9 p.m. was 57.5°. The screened thermometers fell to 48.1° on Tuesday, and rose to 71.0° on Saturday. Rain fell on two days to the amount of .549 inch, 429 inch being measured on Sunday. Southerly and south-easterly winds predominated.

Except on Sunday and Saturday, very fine weather prevailed in Ireland during the week ended Saturday, the 18th. In England it was dull, cold, and generally unseasonable until Thursday. Early on Sunday very electrical clouds were seen over Dublin, and there was much distant thunder between 9 and 10 a.m. The rolling of thunder began again at midday, and at 2 p.m. there was a heavy thunderstorm to the S.W. of the city, accompanied by drenching rain in places. No rain fell to the S.E., in Fitzwilliam-square the measurement was only .028 inch, at Glasnevin Botanic Gardens .060 inch, at the Ordnance Survey Office, Phoenix Park, .200 inch. The evening was cool and fine. During the storm the higher clouds came from S.E. or S.S.E., the lower stratus drove down from N. or N.N.E. A period of cloudy, cool weather followed, and this in turn gave place to bright, quiet, warm, weather, lasting until Friday night. On the day named the thermometer rose to 74.9° in the screen. Saturday was cloudy and blustering, with light showers. The dull, cold weather experienced in England was caused by depressions lying over the South of France, Spain, and Italy, where heavy rains fell. In Dublin the barometer rose to 30.357 inches at 9 a.m. of Tuesday (wind, N.E.) and fell to 30.002 inches at 9 a.m. of Saturday (wind, W.S.W.). Its mean height was 30.251 inches. The corrected mean temperature was 58.6°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 59.6°. The screened thermometers fell to 46.8° on Wednesday and rose to 74.9° on Friday. Rain fell on two days to the amount of .087 inch, of which .039 inch was measured on Saturday. Thunder and lightning occurred on Sunday. N.E. and afterwards W. winds prevailed.

Fair and warm at first, the weather during the week ended Saturday, the 25th, gradually became very unsettled, squally, showery, and cold. Only on Sunday and for a short time on Thursday morning was the distribution of atmospheric pressure anticyclonic, and then only in the south. For the rest, progressively deepening depressions passed eastward across the northern part of the Kingdom, and on Saturday morning the barometer was down to 29.28 inches at Nairo, and as low as 29.33 inches even in Dublin. Sunday was a fine, warm day—the maximal temperature in Dublin was 72.3°. On Monday the maximum was 72.6°, there were passing showers and fine intervals. Tuesday was fine but cloudy; towards evening temperature gave way fast. Heavy showers of rain and hail fell on Wednesday. Thursday afternoon proved rainy. Friday was rainy to showery and cold, but with intervals of bright sunshine. Rain fell heavily on Saturday forenoon, when the wind drew round to N. In Dublin the mean height of the barometer was 29.757 inches, pressure ranging between 30.167 inches at 9 a.m. of Sunday (wind, N.W.) and 29.330 inches at 7.30 a.m. of Saturday (wind, W.N.W.). The corrected mean temperature was 58.6°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 57.6°. The screened thermometers rose to 72.6° on Monday and fell to 46.9° on Thursday. Rain fell on five days to the amount of .659 inch, .191 inch being measured on Saturday. Westerly winds prevailed.

Generally favourable, yet changeable, was the weather of the closing period of the month—the 26th to the 30th inclusive. At the beginning an atmospheric depression lay exactly over England, where the weather was broken, cold and showery, with hail and thunder in many places. In Ireland northerly winds prevailed, and conditions were more genial. Thunder was heard in Dublin on the evening of Sunday, the 26th. Monday and Tuesday were fine days. On Wednesday shallow depressions, passing eastwards, caused changeable, showery weather. There was, however, a general rise of temperature. Thursday was cloudy, but fine. The extremes of temperature were both recorded on Tuesday—highest, 69.0°; lowest, 46.3°. Rain fell on two days to the amount of .065 inch, .051 inch being registered on Wednesday. The barometer rose from 29.647 inches at 9 a.m. of Sunday (wind, N.) to 30.197 inches at 9 p.m. of Thursday (wind, W.N.W.).

The rainfall in Dublin during the six months ending June 30th amounted to 12.115 inches on 98 days, compared with 13.950 inches on 113 days in 1897, 7.854 inches on 84 days in 1896, 12.282 inches on 80 days in 1895, 14.361 inches on 109 days in 1894, 9.624 inches on 78 days in 1893, 11.770 inches on 97 days in 1892, 8.748 inches on 77 days in 1891, 13.413 inches on 94 days in 1890, only 6.741 inches on 67 days in 1887, and a twenty-five years' average of 12.318 inches on 95.4 days.

At Knockdohas, Greystones, Co. Wicklow, the rainfall was 1.035 inches, distributed over 10 days. Of this quantity .345 inch fell on the 24th. The total fall since January 1 has been 18.500 inches on 83 days, compared with 18.125 inches on 106 days in the first six months of 1897, 7.856 inches on 61 days in the same period of 1896, 14.270 inches on 67 days in 1895, 17.481 inches on 96 days in 1894, and 11.776 inches on 75 days in 1893.

The rainfall at Clonsilla, Killiney, Co. Dublin, amounted to 2.60 inches on 15 days. The greatest fall in 24 hours was .91 inch on the 5th. The average rainfall for June in the 12 years, 1893-1896, was 1.515 inches on 11.7 days. In 1897, 3.53 inches fell on 20 days, in 1896 1.65 inches fell on 13 days. Since January 1, 1898, 18.10 inches of rain have fallen at this station on 97 days, compared with 14.80 inches on 113 days in the corresponding six months of 1897.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall was 2.450 inches on 14 days, compared with 4.078 inches on 15 days in June, 1897. On the 5th, 1.290 inches were measured, and on the 24th, .852 inch. The maximum temperature in the shade was 73.0° on the 17th, the minimum temperature in the shade was 41.0° on the 2nd and 3rd. At this climatological station the rainfall for the six months ending June 30, amounted to 14.918 inches on 88 days, compared with 18.672 inches on 102 days in the same period of 1897.

JULY.—Strangely like July, 1897, this month was very fine and dry, with a mean temperature slightly above the average. Of the total scanty rainfall (945 inch) 61·6 per cent (581 inch) fell on the 21st and 22nd. Throughout the month the barometer ruled high over Ireland, where the isobars ran anticyclonically. Over Northern Europe, on the contrary, conditions were cyclonic, and depressions followed each other in rapid succession from W to E or N.W. to S.E.

On the 22nd a cyclonic system passed north-eastwards across the South of Ireland, causing the only really broken weather of the month.

In Dublin the arithmetical mean temperature (61·1°) was slightly above the average (60·6°); the mean dry-bulb readings at 9 a.m. and 9 p.m. were 60·2°. In the thirty-three years ending with 1897, July was coldest in 1879 ("the cold year") (M.T. = 57·2°). It was warmest in 1887 (M.T. = 63·7°); and in 1868 (the "warm year") (M.T. = 60·5°). In 1897 the M.T. was 61·1°.

The mean height of the barometer was 30·145 inches, or 0·259 inch above the corrected average value for July—namely, 29·915 inches. The mercury marked 30·445 inches at 9 a.m. of the 11th, and fell to 29·611 inches at 3 p.m. of the 22nd. The observed range of atmospheric pressure was, therefore, 0·784 inch.

The mean temperature deduced from daily readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was 60·2°, or 2° above the value for June, 1898. Using the formula, *Mean Temp. = Min. + (max.—min. × 465)*, the value was 60·6°, or 0·4° above the average mean temperature for July, calculated in the same way, in the twenty-five years, 1868–92, inclusive (60·2°). The arithmetical mean of the maximal and minimal readings was 61·1°, compared with a twenty-five years' average of 60·6°. These values were identical with those recorded in July, 1897. On the 11th the thermometer in the screen rose to 75·2°—wind, W.; on the 4th the temperature fell to 44·9°—wind, N. The minimum on the grass was 30·8° on the 30th.

The rainfall was only 945 inch, distributed over 8 days. The average rainfall for July in the twenty-five years, 1868–92, inclusive, was 2·420 inches, and the average number of rainy days was 17·2. The rainfall, therefore, and also the rainy days, were much below the average. In 1889 the rainfall in July was very large—6·087 inches on 24 days; in 1894, also, 5·474 inches fell on 18 days, and in 1893, 4·903 inches on 16 days. On the other hand, in 1870, only ·339 inch was measured on 3 days; in 1860 the fall was only 739 inch on 9 days, and in 1863 only 741 inch fell on but 3 days.

High winds were noted on 9 days, but attained the force of a gale on only one occasion—the 18th. Temperature reached or exceeded 70° in the screen on 7 days. In July, 1887, temperature reached or exceeded 70° in the screen on no fewer than 17 days. In 1888, the maximum for July was only 68·7.

Thunder occurred on the 22nd. A solar halo was seen on the 20th. The atmosphere was rather foggy on the 9th and 22nd.

Friday, the 1st, was cool and changeable. A light sea-breeze prevailed until 2 p.m., when rain set in and fell heavily for 4 hours, the measurement being ·250 inch. Saturday, the 2nd, was chiefly fine but not settled.

Very fine and, in the end, brilliant weather was enjoyed during the week ended Saturday, the 9th, throughout which a high atmospheric pressure held off the west or south-west of Ireland. On the other hand, depressions of no great depth crossed Scandinavia in an easterly direction one after another. Northerly winds prevailed in the British Isles and the nights were at first often very sharp for the time of year—39° F. being registered at Wick on Sunday, and at Parnostown on Monday morning, 42° at Donaghadee, Parnostown, and Valentia Island on Tuesday morning. Sunday was a beautiful day near Dublin, and in the evening a fine partial eclipse of the moon was well seen in a clear sky. Temperature rose on Tuesday, and fresh W. to N.W. winds blew on that and the following day, accompanied by a great deal of cloud. On Thursday very slight drizzle was observed once or twice, but no measurable rainfall occurred. Friday and Saturday were days of brilliant sunshine and cool easterly sea-breezes in the daytime. Towards evening on Saturday some fog and haze were observed. In Dublin the mean height of the barometer was 30·273 inches, the range of pressure being from 30·037 inches at 9 a.m. of Sunday (wind, N.W.) to 30·335 inches at 9 p.m. of Saturday (wind, E.N.E.). The corrected mean temperature was 58·8°. The mean dry-bulb reading at 9 a.m. and 9 p.m. was 59·1°. On Wednesday and also on Thursday the thermometer rose to 69·6° in the screen, having fallen to 44·9° on Monday. N.W. winds prevailed. There was no measurable rainfall.

The record of the week ended Saturday, the 16th, is again one of fine summerlike weather, with prevalent north-westerly winds. The barometer was usually highest to the west or south of Ireland, and in this country the isobars ran anticyclonically, except on Wednesday, when a rather large depression passed across Scandinavia from N.N.W. to S.S.E. The first two days were very fine, warm, and sunny. On Monday the thermometer rose to 75·2° in the shade in Dublin. A slight shower fell at this station early on Tuesday morning, yielding only 0·03 inch in the rain-gauge. The day was cloudy and unsettled-looking, with a fresh W.N.W. wind. Wednesday was cloudy to fair. Some rain fell in the extreme W. and S.W. of Ireland, and also in the E. and S.E. of Great Britain. This slight break in the weather was connected with the presence of a depression over Scandinavia, where rain fell more abundantly than in the British Isles. The last three days of the week were fine with a good deal of cloud at times. On Friday the thermometer rose to 82° in the shade in London. In Dublin the mean height of the barometer was 30·220 inches, pressure ranging from 30·445 inches at 9 a.m. of Monday (wind, N.N.W.) to 30·008 inches at 9 a.m. of Wednesday (wind N.W.). The corrected mean temperature was 62·7°. The mean dry-bulb temperature was 62·4°. On Monday the screened thermometers rose to 75·2°, having fallen to 51·6° on Sunday. N.W. winds prevailed. The rainfall amounted but to a trace—0·04 inch, and there was not even one "rainy day."

Although by no means so settled as in the two preceding weeks, the weather during the week ended Saturday, the 23rd, was favourable, and a general rainfall benefited the country. By Monday morning a trough-shaped depression had advanced over the north of Scotland, and gradients for westerly winds were steep to the southward of the lowest pressure, which was 29.60 inches at Skewway and Wick. Accordingly strong to squally W. to N.W. winds prevailed, and a moderate gale was felt for a while in and near Dublin. Very little rain fell in connection with this disturbance, which passed quickly on to Scandinavia, becoming much modified in form as it travelled. In its rear an anticyclone of no intensity came in over Ireland, causing quiet and fine but cloudy weather. On Thursday the barometer gave way generally in the west, and by 8 a.m. of Friday a well-marked depression, secondary to a large area of low pressure lying over the Norwegian Sea and Lapland, had arrived off the coast of Kerry. Thence it passed north-easterly, accompanied by an abundant rainfall and thunder in many places. In its wake the weather cleared and became once more warm and summerlike. In Dublin the mean height of the barometer was 29.959 inches, the range of pressure being from 30.260 inches at 9 a.m. of Sunday (wind, N.W.) to 29.601 inches at 3 p.m. of Friday (wind, N.E.). The corrected mean temperature was 62.3°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 61.4°. On Sunday the screened thermometers rose to 72.8°, on Saturday they fell to 53.7°. The rainfall was 60.5 inch on five days, 34.2 inch being measured on Friday, when thunder was heard. The prevailing winds were at first N.W., then E.S.E.

While the weather was for the most part dry during the week ended Saturday, the 30th, it was cooler and more cloudy than in past weeks. Only on Wednesday and Saturday was anything like summer heat felt in Dublin. The barometer was again highest in Ireland, lowest over Northern Europe. On Sunday morning a depression (with central readings as low as 29.15 inches) stretched from Christiania to Stockholm. Cool and strong N. and N.W. winds prevailed in Great Britain. In Ireland the air was calmer. The next two days were chiefly fine and quiet, but a considerable rainfall occurred on Tuesday in the South of Ireland. On Wednesday evening a veil of cirrus cloud appeared in the W. and N.W., heralding the approach of a depression to the Scottish coasts. This disturbance travelled rapidly down the east coast of Great Britain, reaching Holland on Friday morning. It caused showers and a moderate northerly gale on the Irish coasts, but thunderstorms and heavier rains in many parts of England. On Friday morning the measurements were 55 inch at Nairn, 54 at Slieve, 60 inch at the North Foreland, 56 inch at Cambridge, 99 inch at Yarmouth, and 1.65 inches at the Helder. On Friday night a remarkable depression of air-temperature occurred, the thermometer sinking in Dublin to 43.8° in the screen and to 49.8° on the grass. Curiously enough a few hours later the maximum of the week—71.1°—was recorded in Dublin. In this city the mean height of the barometer was 30.139 inches, pressure varying from 29.994 inches at 9 a.m. of Thursday (wind, N.W.) to 30.288 inches at 9 a.m. of Friday (wind, N.E.). The corrected mean temperature was 59.2°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 58.4°. Rain fell on Wednesday to the amount of .034 inch. The prevailing winds were E.S.E. and N.W.

The last two days were chiefly fine, but cloudy. On Sunday afternoon, the 31st, a heavy but very local shower fell over the S.E. of Dublin, yielding .052 inch of rain in the gauge.

The rainfall in Dublin during the seven months ending July 31st amounted to 13.060 inches on 106 days, compared with 15.600 inches on 125 days in 1897, 13.328 inches on 102 days in 1896, 16.785 inches on 96 days in 1895, 18.153 inches on 180 days in 1894, 11.666 inches on 92 days in 1893, 7.935 inches on 50 days in 1887, and a twenty-five years' average of 14.733 inches on 112.6 days.

At Knockdolia, Greystones, Co. Wicklow, the rainfall in July was 1.145 inches on 6 days, compared with 1.625 inches on 10 days in 1897, 5.726 inches on 16 days in 1896, 3.680 inches on 16 days in 1895, 3.895 inches on 19 days in 1894, and 1.290 inches on 15 days in 1893. Of the total rainfall 350 inch fell on the 1st, and .445 inch on the 21st. The total fall since January 1 has been 14.645 inches on 84 days, compared with 19.750 inches on 116 days in 1897, 15.082 inches on 77 days in 1896, 17.950 inches on 83 days in 1895, 21.166 inches on 113 days in 1894, and 13.686 inches on 90 days in 1893.

At Clonevin, Killinny, Co. Dublin, the rainfall in July was .840 inch on 7 days, compared with a twelve years' average of 2.554 inches on 168 days. On the 22nd the rainfall was .350 inch. In July, 1897, 1.328 inches fell on 10 days; in 1896, 6.72 inches on 20 days; in 1895, 3.58 inches on 17 days; in 1894, 4.08 inches on 23 days; in 1893, only .70 inch on 9 days. Since January 1, 1893, 13.94 inches of rain have fallen on 104 days at this station.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall was 1.380 inches on 6 days, compared with 1.425 inches on 11 days in July, 1897, .480 inch being measured on the 21st, and .425 inch on the 22nd. At this Second Order Station 16.298 inches of rain have fallen on 94 days since January 1, 1893. The maximal temperature in the shade in July was 76.0° on the 30th, the minimum was 42.8° on the 4th.

August.—Like August, 1897, this was a changeable, showery, windy, but warm month. In the south and south-east of England great heat prevailed in the middle of the month, which was broken and rainy in Ireland. Thunder and lightning of unusual intensity occurred in the S.W. and S. of Ireland on the 18th and 21st. The wind was often high and squally.

In Dublin the arithmetical mean temperature (61.4°) was decidedly above the average (59.7°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 60.2°. In the thirty-three years ending with 1897, August was coldest in 1881 (M.T.=57.0°), and warmest in 1893 (M.T.=63.0°). In 1897 the M.T. was 60.8°; in 1879 (the "cold year"), it was 57.7°.

The mean height of the barometer was 29.904 inches, or 0.067 inch above the corrected average value for August—namely, 29.837 inches. The mercury marked 30.308 inches at 9 p.m. of the

31st, and fell to 29.531 inches at 6 p.m. of the 5th. The observed range of atmospheric pressure was, therefore, 0.777 inch.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 60.2°. It was exactly equal to the value for July, 1895. Using the formula, *Mean Temp. = Min. + (max. - min. × .47)*, the mean temperature was 61.0°, or 1.7° above the average mean temperature for August, calculated in the same way, in the twenty-five years, 1865-89, inclusive (59.3°). The arithmetical mean of the maximal and minimal readings was 61.4°, compared with a twenty-five years' average of 59.7°. On the 5th the thermometer in the screen rose to 75.4°—wind, W.S.W.; on the 9th the temperature fell to 47.2°—wind, N.W. The minimum on the grass was 41.8°, also on the 9th.

The rainfall was 3.456 inches, distributed over 18 days. The average rainfall for August in the twenty-five years, 1865-89, inclusive, was 2.625 inches, and the average number of rainy days was 15.5. The rainfall, therefore, and the rainy days were considerably in excess of the average. In 1874 the rainfall in August was very large—4.946 inches on 18 days; in 1868, also, 4.745 inches fell on, however, only 13 days; but the heaviest downpour in August occurred in 1880, when 5.747 inches were registered on 22 days. On the other hand, in 1884, only .777 inch was measured on 8 days. In 1897, 3.788 inches fell on 24 days.

High winds were noted on as many as 12 days, and attained the force of a gale on four occasions in Dublin—the 2nd, 5th, 29th and 30th. Thunder occurred on the 21st, lightning on the 7th, 15th, and 21st. Temperature reached 76° in the screen on 9 days. Solar halos were seen on the 7th and 9th. The atmosphere was foggy on the 19th, 20th, 21st and 26th.

During the period ended Saturday, the 6th, the weather was much less settled in Ireland than it had been for several weeks past. Strong and squally westerly winds prevailed and rain fell abundantly on Wednesday, Thursday, and Friday. On the morning of the last-named day the wind blew a gale, and on Tuesday also the wind reached gale force at times. On and after Monday, the 1st, there was a general reduction of atmospheric pressure over north-western Europe, and gradients for westerly (between S.W. and N.W.) winds remained steep until Saturday, the 6th. Accordingly the weather was unsettled and blustering, particularly on Friday, when gales prevailed both in the Irish Sea and in St. George's and the English Channels. Great warmth accompanied the gale of Friday, and as the air was damp at the same time, the weather was oppressive. In Dublin the thermometer rose to 75.4° during the gale. Large quantities of rain fell in Ireland and the North of England on Wednesday and the two following days. On Friday morning a cyclonic centre lay over Antrim, moving north-eastwards. To this system the gales and rain of Friday were due. The arrival of a subsidiary or secondary depression on Saturday in more southern latitudes equalised pressure and caused a fine day in Ireland. In Dublin the barometer ranged from 30.128 inches at 9 a.m. of Monday (wind, W.) to 29.531 inches at 6 p.m. of Friday (wind, W.S.W.). The screened thermometers rose to 75.4° on Friday and fell to 52.5° on Thursday. Westerly winds prevailed and were often strong and squally. The rainfall on four days amounted to 1.163 inches, .469 inch being measured on Thursday.

High winds, heavy rains, and spells of fine hot weather made up the record of the week ended Saturday, the 13th. Sunday was fine until evening, when there were heavy showers and some lightning was seen. At night a cyclonic system advanced to Brittany from the westward. This disturbance subsequently travelled across the North of France, Belgium, and Holland, to Denmark. In its passage it caused very heavy rains in England and on the Continent, and thunder and lightning occurred in some localities in Great Britain. A cold night was experienced in Ireland on Tuesday and a few hours later a new depression brought heavy rain and strong, squally S. to S.W. winds to Ireland and Scotland. At 8 a.m. of Wednesday the barometer was down to 29.466 inches in the Hebrides. An anticyclone now formed over Germany, spreading westward across the S. of England. The weather became fine and warm and so remained until Friday, when another rainstorm passed over Ireland from S. to N. At this time the thermometer ranged very high in Great Britain, rising to 80° in London and at Cambridge on Thursday, and to 83° in these places on Friday. Saturday was fair and warm in Dublin and its vicinity. The mean height of the barometer was 29.914 inches, pressure rising to 30.163 inches at 9 a.m. of Tuesday (wind, N.W.) and falling to 29.576 inches at 5.30 p.m. of Friday (wind, S.S.W.). The corrected mean temperature was 66.9°. The mean dry-bulb temperature at 9 a.m. and 9 p.m. was 60.2°. The screened thermometers fell to 47.2° on Tuesday and rose to 78.1° on Saturday. The rainfall was .866 inch on five days, .413 inch being registered on Tuesday. The prevailing winds were S.W. and N.W. They were often strong in force and squally. Solar halos were seen on Sunday and Tuesday.

The words "warm but unsettled" best describe the weather of the week ended Saturday, the 20th. There were no large or deep atmospheric depressions, but the barometer was unsteady, and shallow "thunderstorm depressions" formed from time to time. In the earlier part of the week the irregularities in pressure were most marked over France and England. Very little rain fell in the London district, where the heat was almost tropical, the thermometer in the shade rising to 85° on Sunday, 87° on Monday, and 83° on Tuesday. On Monday night faint sheet lightning was seen frequently on the extreme S.E. horizon from the Dublin and Wicklow coasts. A sharp thunderstorm prevailed over the S. of England. Tuesday and Wednesday were beautifully fine in Dublin, but on Wednesday night a violent thunderstorm broke out in the S.W. of Ireland, thence spreading out northwards and eastwards over both Ireland and England. These disturbances were caused by a large shallow depression (with its secondaries) which spread slowly northwards from the Peninsula to the S.W. of Ireland between Wednesday and Friday. In Dublin there was no thunder, but the air was murky and damp on Thursday and Friday and rain fell at times. Saturday proved finer and very warm after a rainy morning. In Dublin the barometer read on the average 30.063 inches, the range being from 29.955 inches at 9 a.m. of Sunday (wind, S.S.W.) to 30.177

fathoms at 9 a.m. of Wednesday (wind, E.N.E.). The corrected mean temperature was 62.2°. The mean dry-bulb reading at 9 a.m. and 9 p.m. was 61.4°. The screened thermometer rose to 73.3° on Sunday and fell to 51.7° on Wednesday. The prevalent wind was first W.N.W., then E. Rain fell on four days to the amount of .234 inch, .134 inch being measured on Friday. Lightning was seen on Monday evening. Fog occurred on Friday and Saturday.

Unsettled in Ireland, the week ended Saturday, the 27th, was hot and fine in the S.E. of England, the thermometer rising to 89° in the shade in London on Monday. The great heat, however, in the metropolitan district gave way on Tuesday. At the beginning of the week a severe thunderstorm passed across the S.E. of Ireland and the S. of Wales. After dusk on Sunday a magnificent display of chain lightning was seen over the sea from the Dublin and Wicklow coasts. On Tuesday morning a V-shaped depression lay over Wales, the Bristol Channel, Devon, and Cornwall. In its rear northerly winds prevailed in Ireland, bringing fine and cool weather. On Wednesday the thermometer rose only to 63.6° in Dublin. During this day and Thursday an area of high barometric pressure passed slowly eastwards, causing very fine and pleasant weather. On Thursday afternoon the approach of a depression caused a break in the weather, and at night a small subsidiary passed eastwards across Ireland, reaching Wales on Friday morning. This disturbance brought a downpour of rain to central and eastern Ireland—the measurement at Passmorestown was 1.66 inches, in Dublin .89 inch, on Friday morning. The main depression kept the weather dull, unsettled and showery to the close of the week. In Dublin the mean atmospheric pressure was 29.987 inches, the barometer rising to 30.271 inches at 9 p.m. of Wednesday (wind, W.) and falling to 29.627 inches at noon of Saturday (wind, W.S.W.). The corrected mean temperature was 60.5°. The mean dry-bulb reading at 9 a.m. and 9 p.m. was 60.1°. The screened thermometer rose to 72.8° on Monday and fell to 49.0° on Thursday. Rain fell on four days to the amount of 1.238 inches, .991 inch being registered on Thursday. Thunder and lightning occurred on Sunday. S. and N.W. winds prevailed.

Stormy, changeable weather prevailed from Sunday, the 28th, to Tuesday, the 30th. On the latter day a deep depression travelled rapidly eastwards from the North of Ireland across the South of Scotland. It caused heavy rains in North Britain and a fresh gale in Ireland. This disturbance was followed by anticyclonic conditions and fine, cool weather on Wednesday, the 31st.

The rainfall in Dublin during the eight months ending August 31st amounted to 16.516 inches on 194 days, compared with 19.388 inches on 149 days in 1897, 14.464 inches on 120 days in 1896, 9.455 inches on 86 days during the same period in 1887, and a twenty-five years' average of 17.658 inches on 1281 days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall in August was 3.185 inches on 18 days, compared with 6.135 inches on 27 days in 1897, 1.245 inches on 14 days in 1896, and 4.735 inches distributed over 24 days in 1895. Of this quantity .620 inch fell on the 25th. The total fall since January 1 amounts to 17.630 inches on 112 days, compared with 23.945 inches on 143 days in 1897, 14.527 inches on 91 days in 1896, 22.685 inches on 107 days in 1895, 25.206 inches on 131 days in 1894, and 16.341 inches on 106 days in 1893.

At the National Hospital, Newcastle, Co. Wicklow, the rainfall in August was 3.603 inches on 16 days, compared with 4.526 inches on 29 days in 1897, 7.16 inch being measured on the 25th and .670 inch on the 12th. Since January, 1896, the rainfall at this Second Order Station has been 29.101 inches on 110 days. The maximal temperature in the shade in August was 75.0° on the 2nd, the minimum temperature was 49.1° on the 29th.

SEPTEMBER—September, 1898, was a warm, dry, summerlike month. It recalled memories of the wonderful September of 1865, when the mean temperature in Dublin reached 61.4° and the rainfall was only .056 inch on 3 days. In the S.E. of England torrid heat prevailed in the early part of the month, and the London district in particular was parched with drought, as well as burned with heat. In Ireland generally the rainfall was up to the average as on several occasions torrential rains fell in connection with V-shaped depressions passing northwards or north-eastwards across this island.

In Dublin the arithmetical mean temperature (60.2°) was much above the average (55.6°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 58.7°. In the thirty-three years ending with 1897, September was coldest in 1896 and in 1882 (M. T.—53.0°), and warmest in 1865 (M. T.—61.4°), and in 1880 (M. T.—59.6°).

The mean height of the barometer was 30.036 inches, or 0.126 inch above the corrected average value for September—namely, 29.910 inches. The mercury rose to 30.406 inches at 9 p.m. of the 3rd, and fell to 29.416 inches at 5.30 p.m. of the 29th. The observed range of atmospheric pressure was, therefore, .990 inch.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 58.7°, or 1.6° below the value for August, 1898. Using the formula, Mean Temp. = $\frac{1}{2}(\text{M.T.} + \text{min.} \times .476)$, the mean temperature was 59.8°, or 4.8° above the average mean temperature for September, calculated in the same way, in the twenty-five years, 1865–90, inclusive (55.0°). The arithmetical mean of the maximal and minimal readings was 60.2°, compared with a twenty-five years' average of 55.8°. On the 6th the thermometer in the screen rose to 77.8°—wind, S.W.; on the 25th the temperature fell to 43.6°—wind, W. The minimum on the grass was 37.9°, on the 29th.

The rainfall was 1.452 inches, distributed over 13 days. The average rainfall for September in the twenty-five years, 1865–90, inclusive, was 2.176 inches, and the average number of rainy days was 14.7. In 1871, the rainfall was very large—4.048 inches on, however, only 13 days. In 1896, no less than 5.073 inches fell on 23 days, establishing a record rainfall for September. On the other hand, in 1865, only .056 inch was measured on but 3 days.

High winds were noted on 9 days, and attained the force of a gale on three occasions in Dublin—the 18th, 20th, and 30th. The atmosphere was foggy on the 4th, 15th, and 25th. Solar halos were seen on the 7th and 8th; lunar halos on the 28th and 30th; lightning on the 16th. There was a magnificent aurora borealis on the evening of the 9th.

With the coming of September the weather became extremely fine, warm, and in all respects summerlike. An anticyclone formed on Thursday, the 1st, in the wake of a depression which had passed quickly eastwards across the British Isles during the closing days of August. On the morning of Friday, the 2nd, a new depression in the far North temporarily broke up the high-pressure system, which, however, formed again on Saturday—a brilliant and hot day. At 9 p.m. the barometer rose to 30.466 inches (wind, S.E.). On Friday the screened thermometers rose to 74.4°, having fallen to 48.5° on Thursday, on the morning of which day Snowdon was clearly seen from the Wicklow coast.

A remarkable wave of heat passed over France and the British Islands during the week ending Saturday, the 10th. It culminated on Thursday, when the thermometer rose in the shade to 88° at Brussels, 89° in Paris, 90° at Oxford and Loughborough, 91° in London and at Lyons, 92° at Cambridge, and 93° at Rochester. At this time a heavy rainstorm passed over Ireland, 51 inch of rain falling at Donaghadee, 52 inch in Dublin, 48 inch at both Parsonstown and Valentia, and 98 inch at Roche's Point. Until Wednesday an anticyclone stretched westward across Great Britain to Ireland, and light or moderate easterly to southerly winds prevailed. As the amount of cloud was small the sun's rays held uninterrupted away, with the result that temperature rose daily higher and higher. Even in Dublin a maximum of 77.8°—the highest reading of the season—was recorded on Tuesday. On Wednesday the weather was less fair in Ireland owing to the approach of a large but shallow depression to the west coast. A good deal of rain fell over the western half of this country, but only a small quantity in the east. On Thursday night a V-shaped depression passed north-eastward across Ireland. It brought thunder and lightning to some stations and a general downpour of rain. In the rear of this low pressure system a brisk fall of temperature occurred and the sky cleared with a N. or N.W. wind. On Friday evening an exceptionally brilliant display of aurora borealis occurred. Saturday was dull to fair and warm. In Dublin the mean height of the barometer was 30.444 inches, pressure ranging from 30.313 inches at 9 a.m. of Sunday (wind, S.E.) to 29.883 inches at 5 p.m. of Thursday (wind, S.S.W.). The corrected mean temperature was 64.4°. The mean dry bulb temperature at 9 a.m. and 9 p.m. was 62.8°. On Tuesday the screened thermometers rose to 77.8°, on Saturday they fell to 53.7°. Rain fell on five days to the amount of .407 inch, .623 inch being measured on Thursday. The wind was at first S.E., then N.W.

Taken as a whole the weather of the week ended Saturday, the 17th, may be looked on as fine and warm. At the beginning and close a cyclonic distribution of atmospheric pressure prevailed, but from Wednesday to Friday the barometer was high, the total of 39.6 inches being found over Germany on Thursday and Friday. A good deal of rain (.149 inch) fell in Dublin on Sunday, when a V-shaped depression passed eastwards across Ireland, reaching Belgium on Monday morning. This disturbance gave even London some showers (.046 inch). There was another depression on Tuesday. As it passed away a large area of high pressure spread across England and Ireland from the Continent. Its S. winds were accompanied by another heat wave in which the thermometer rose slightly above 89° in the S.E. of England on Thursday. Next day the barometer gave way in Ireland, and lightning was seen at night. Saturday was changeable and showery with thunder in places. In Dublin the mean height of the barometer was 30.027 inches, pressure ranging between 30.313 inches at 9 a.m. of Thursday (wind, calm), and 29.680 inches at 6 p.m. of Saturday (wind, S.S.W.). The corrected mean temperature was 62.3°. The mean dry bulb reading was 61.6°. On Wednesday the screened thermometers rose to 72.6°, on Monday they fell to 48.0°. The rainfall was .274 inch, on three days, .149 inch being measured on Sunday, and .112 inch on Saturday. Westerly winds predominated. Lightning was seen on Friday evening. The rainfall at Greystones, county Wicklow, was .146 inch on four days.

A decided fall in temperature was the most striking feature in the weather of the week ended Saturday the 24th. On Sunday a large V-shaped atmospheric depression passed eastwards across the British Islands. At 8 a.m. southerly winds and high temperatures were found over England, while a northerly gale was blowing in Ireland, where temperature was from 10° to 18° lower than on the previous morning. Even in the S.E. and S. of England a brisk fall of temperature occurred—as brisk that, whereas on Saturday, September 17, the shade thermometer had risen to 86° at Oxford, 87° at Loughborough, 88° in London, and 89° at Cambridge, on Sunday night the minima were—44° at Loughborough, 42° at Oxford, and 41° in London and at Cambridge. A recovery of temperature subsequently took place, but it proved transitory, for after an anticyclone had formed over the British Isles on Thursday, the shade thermometer fell at night to 39° at Cambridge and Teck, 38° at Parsonstown and Leith, 36° at Loughborough and Slurroway, and 34° at Nairn. Friday night gave readings of 32° at Loughborough and 31° at Nairn. On Wednesday quite a considerable rainfall took place in Dublin, amounting to .099 inch. It was due to a shift of wind from W. to N.E. in connection with a large but shallow depression over the Peninsula and the Bay of Biscay. The last three days were cloudy and hazy to fair and bright. The nights were cool and heavy dew fell in the open fields. In Dublin the mean height of the barometer was 30.070 inches, pressure ranging from 29.851 inches at 9 a.m. of Sunday (wind, N.W.) to 30.232 inches at 9 a.m. of Friday (wind, E.S.E.). The corrected mean temperature was 57.8°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 55.9°. The screened thermometers rose to 70.9° on Tuesday and fell to 48.2° on Saturday. On Thursday the maximum was only 57.6°. The rainfall was .180 inch on two days, .099 inch being registered on Wednesday. At first westerly, afterwards easterly winds prevailed.

The closing days of September (25th-30th) witnessed the substitution of cyclonic for anticyclonic conditions over the British Isles, and a complete break in the weather, which became stormy, cold, and rainy—first in Ireland and afterwards in Great Britain also. On the first two days the centre of a dispersing anticyclone was found over the N.E. of England. The weather was quiet and fine, with a large diurnal range of temperature at inland stations. Thus, at Loughborough, Leicestershire, the shade thermometer rose to 59° on Sunday and fell to 29° during the ensuing night—a range of 30° F. in very few hours. On Tuesday morning a V-shaped depression advanced across Ireland, where rain fell heavily and the wind shifted from S.E. to N.W. as the trough of low atmosphere pressure passed by. In the rear of this disturbance Wednesday proved fine and bracing, but a lunar halo at night heralded the approach of a new and even deeper depression from the westward. This system caused extremely heavy rains in many places and gales of winds from N.W. or N. when the centre had passed by. Even in England there was an abundant rainfall on Friday. A lunar halo was again seen on Friday night. In Dublin the barometer ranged between 29.416 inches at 5.30 p.m. of Thursday (wind, W.) and 30.166 inches at 9 p.m. of Friday (wind also W.). The shade thermometers fell to 43° on Sunday and rose to 63° on Monday. The rainfall was 4.11 inch on four days, 2.10 inch being measured on Tuesday. S.E. and N.W. winds alternated with each other.

The rainfall in Dublin during the nine months ending September 30th amounted to 17.928 inches on 137 days, compared with 10.968 inches on 112 days during the same period in 1887, 21.971 inches on 163 days in 1897, and a twenty-five years' average of 19.734 inches on 142½ days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall was 1.858 inches distributed over 12 days. Of this quantity .530 inch fell on the 8th. At that station the rainfall since January 1, 1898, has been 19.688 inches on 124 days, compared with 17.091 inches on 118 days in the same nine months of 1893, 25.896 inches on 137 days in 1894, 23.663 inches on 117 days in 1895, and 21.912 inches on 115 days in 1896, and 29.570 inches on 158 days in 1897.

At Clonsilla, Killybeg, Co. Dublin, the rainfall in August was 2.79 inches on 20 days (the maximal fall in 24 hours being .80 inch on the 25th), compared with a twelve years' average of 2.887 inches on 16½ days. In September 1.46 inches fell at Clonsilla on 13 days. The maximal fall in 24 hours was .40 inch on the 27th. On an average of twelve years the September rainfall at this station has been 1.773 inches on 121 days. Since January 1st, 1898, 18.19 inches of rain have fallen at Clonsilla on 136 days. The rainfall in the first nine months of the year at Clonsilla was 22.92 inches on 150 days in 1894, 21.53 inches on 139 days in 1895, 20.30 inches on 129 days in 1896, and 22.91 inches on 158 days in 1897.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, rain fell in measurable quantity on 12 days during September to the total amount of 1.991 inches, compared with 3.166 inches on 11 days in the same month of 1897. The maximal fall in 24 hours was .538 inch on the 27th. Since January 1, 1898, the rainfall at this Second Order Station has been 22.091 inches on 122 days. The highest temperature in the screen was 72.5° on the 2nd and 14th, the lowest was 41.7° on the 29th.

OCTOBER.—October, 1898, was singularly mild—the mean temperature being more than 3° above the average. The first 12 days were generally fine and dry, the only rainfall occurring on the night of the 8th and morning of the 9th. On and after the 13th, however, rain fell in Dublin daily up to and including the 30th—that is, on 18 consecutive days.

In Dublin the arithmetical mean temperature (52.8°) was much above the average (49.7°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 51.7°. In the thirty-three years ending with 1897, October was coldest in 1892 (M. T. = 44.8°), and in 1896 (M. T. = 45.0°). It was warmest in 1876 (M. T. = 53.1°). The M. T. in 1897 was 52.8°.

The mean height of the barometer was 29.774 inches, or 0.066 inch below the corrected average value for October—namely, 29.840 inches. The mercury rose to 30.365 inches at 9 a.m. of the 4th, and fell to 29.904 inches at 9 p.m. of the 17th. The observed range of atmospheric pressure was, therefore, as much as 1.461 inches.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 51.7°, or 7.0° below the value for September, 1898. The arithmetical mean of the maximal and minimal readings was 52.8°, compared with a twenty-five years' average of 49.7°. Using the formula, $\text{Mean Temp.} = \text{Min.} + (\text{max.} - \text{min.} \times .485)$, the mean temperature was 52.7°, or 3.2° above the average mean temperature for October, calculated in the same way, in the twenty-five years, 1865-89 inclusive (49.5°). On the 3rd the thermometer in the screen rose to 64.8°—wind, E.; on the 12th, the temperature fell to 40.0°—wind, calm. The minimum on the grass was 34.0°, on the 29th. The thermometer did not sink to or below 32° in the screen, or even on the grass.

The rainfall was 3.679 inches, distributed over 19 days—the rainfall and the rainy days were decidedly above the average. The average rainfall for October in the twenty-five years, 1865-89 inclusive, was 3.106 inches, and the average number of rainy days was 17.6. In 1880 the rainfall, in October was very large—7.358 inches on 15 days. In 1875, also, 7.049 inches fell on 20 days. On the other hand, in 1890, only .639 inch fell on but 11 days; in 1884, only .334 inch on but 14 days; and in 1868 only .856 inch on 15 days.

Lightning was seen on the night of the 11th. High winds were noted on 10 days, and attained the force of a gale on two occasions—the 15th, and 16th. The atmosphere was more or less foggy in Dublin on the 1st, 3rd, 4th, 12th, 20th, 21st, 28th, and 29th. A lunar halo appeared on the 20th. Saturday, the 1st, was at first foggy and cloudy, afterwards dull with slight rain, and mild.

Very favourable weather prevailed almost to the close of the week ended Saturday, the 8th. During the earlier days of the period an anticyclone of large size and much staying power lay directly over the British Islands, where the weather was fine and quiet. On Tuesday this system

began to move away towards N.E., while it increased somewhat in intensity, the barometer rising above 30.40 inches in its centre. The result was that freshening E. and S.E. winds sprang up in the English Channel and over England and Ireland generally, while the area of calms passed northwards to Scotland. On Thursday an area of low atmospheric pressure showed itself off the S.W. of Ireland and began at the same time to spread eastwards, still further steepening gradients for S.E. winds, and causing a gale from that point and rain in the S. and S.W. of Ireland. On Monday and Tuesday thick fogs were experienced in the Irish Sea and the sky subsequently remained densely clouded. A remarkable feature of the week's weather was the warmth felt in the north of Scotland by day and the great diurnal range of temperature in that locality. On Monday the thermometer rose to 73° at Wick, on Tuesday the range at the same station was from 71° to 40° (31° in a few hours). In Dublin the mean height of the barometer was 29.147 inches, pressure ranging from 29.365 inches at 9 a.m. of Tuesday (wind, calm) to 29.856 inches at 9 p.m. of Saturday (wind, S.E.). The corrected mean temperature was 57.9°. The mean dry-bulb reading at 9 a.m. and 9 p.m. was 56.1°. On Monday the screened thermometers rose to 64.8°, on Tuesday they fell 48.3°. E. to S.E. winds prevailed. Rain fell on Saturday night and Sunday morning (the 9th) to the amount of .222 inch. The rainfall at the Botanic Gardens, Glasnevin, on Saturday night and Sunday morning amounted to .549 inch.

In the week ended Saturday, the 15th, the weather, at first fine, although cold, finally became very broken, dull, stormy, and wet. At both the beginning and close the distribution of atmospheric pressure was cyclonic. In the interval an anticyclone of but slight intensity formed over the British Islands, causing calm, cold, foggy nights, but fine days. From Wednesday onward a large area of low pressure kept spreading eastward over the kingdom from the S.W. of Ireland, in which locality rain fell in torrents, the measurement at Roche's Point, Co. Cork, being 3.6 inches. On Sunday morning a V-shaped depression stretched southwards from Donegal to the mouth of the English Channel. The weather was fine and cool after heavy rain in Ireland, while rain fell during the day in many parts of Great Britain. A shallow depression formed over the Continent on Monday, lasting until Thursday. This system caused heavy rain in the Norfolk coast and thunder and lightning in some places on Tuesday night. On Thursday a large depression came in over Ireland while calms and fogs or light E. winds prevailed in England. On Friday morning a small secondary depression was found near Cork, and it was in connection with it that rain fell so heavily in the S.W. of Ireland. Friday and Saturday were dull rainy days even in Dublin. The mean height of the barometer in this city was 29.796 inches, pressure ranging from 29.152 inches at 8 p.m. of Tuesday (wind, N.W.) to 29.147 inches at 9 p.m. of Saturday (wind, E. by S.). The corrected mean temperature was 59.9°. The mean dry-bulb temperature was 49.8°. On Sunday the shade thermometers rose to 61.6°, on Wednesday they fell to 49.0°. The prevailing winds were first W., then S.E., Rain fell on the last three days to the amount of .746 inch, .449 inch being recorded on Saturday. Winter set in this week in Scandinavia. At 8 a.m. of Saturday the thermometer read 19° at Hernösand in Sweden.

The exceedingly broken, rainy weather, which set in towards the close of the previous week, continued during the greater part of the week ended Saturday, the 22nd. On Sunday, the 16th, a large and deep depression was central at the mouth of St. George's Channel where the barometer was below 28.9 inches. An easterly gale blew with little intermission on the east coasts of both Great Britain and Ireland, while rain fell heavily in many places, and the sky wore a most gloomy aspect. By Monday morning the centre of the depression reached Cornwall and the mouth of the English Channel, the barometer reading 28.63 inches at St. Mary's, Scilly Islands, and 28.65 inches at Brest. The wind now backed to N.E. and N. in Ireland, blowing so strongly as before. On Tuesday morning two minima of pressure were found—over Anglesea and near London respectively—but the depression was beginning to fill up. Wet weather continued, but the storm-area passed northwards to Scotland and the north of Ireland. All this time cold, anticyclonic weather held in Scandinavia and to this fact the rains and gales of the period in the British Isles must in some measure be attributed. After Wednesday a succession of depressions passed northwards along the western coasts of Ireland and of Scotland. On Friday and Saturday a brisk rise of temperature occurred. In Dublin the mean height of the barometer was 29.351 inches, pressure ranging from 29.904 inches at 9 p.m. of Monday (wind, N.E.) to 29.792 inches at 9 p.m. of Saturday (wind, S.W.). The corrected mean temperature was 51.6°. The screened thermometers sank to 40.2° on Thursday and rose to 63.9° on Saturday. The mean dry-bulb reading at 9 a.m. and 9 p.m. was 50.3°. The rainfall was 1.336 inches on 7 days, .808 inch falling on Monday. At first N.E. then S.W. winds prevailed.

Mild, but changeable and, in the neighbourhood of Dublin, dull, damp, and often rainy weather prevailed throughout the week ended Saturday the 29th. The general distribution of atmospheric pressure was anticyclonic over France and Germany, cyclonic in the N.W. and N. of Europe. At first gradients were rather steep over the British Isles for S.W. to W. winds, and accordingly the wind blew strongly and in squalls from these points. Rain fell tolerably generally in the form of showers during the first few days, but the measurement was not large, except in the Hebrides, where the rainfall up to Friday morning totted to 3.08 inches. At 8 a.m. of Wednesday the barometer read 30.33 inches at Lyons, but only 29.17 inches in the Shetlands. On Thursday a shallow secondary depression formed over Ireland and St. George's Channel. This led to a light easterly or southeasterly breeze and very dull, rainy weather in North Wales and on the east coast of Ireland. A brief spell of fine weather in Dublin on Saturday forenoon was followed by a return of clouds and east wind and a downpour of rain in the evening. In Dublin the mean height of the barometer was 29.929 inches pressure ranging from 30.024 inches at 9 p.m. of Sunday (wind, W.S.W.) to 29.322 inches at 9 p.m. of Saturday (wind, N.W.). The corrected mean temperature was 52.2°. The mean dry-bulb temperature at 9 a.m. and 9 p.m. was 51.2°. The screened thermometers fell to 46.2° on Monday and Tuesday, and rose to 59.8° on Wednesday. The prevailing wind was W.S.W. Rain fell daily, the total measurement being 6.94 inch, of which .317 inch was measured on Saturday.

Rain fell heavily about midday on Sunday, the 30th. The 31st was cool, bright, and dry.

The rainfall in Dublin during the 10 months ending October 31st amounted to 21.547 inches on 156 days, compared with 12.366 inches on 123 days during the same period in 1887 (the dry year), 22.032 inches on 165 days in 1896, 24.081 inches on 179 days in 1897, and a twenty-five years' average of 22.840 inches on 169.4 days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall in October amounted to 4.489 inches on 16 days. Of this quantity 655 inch fell on the 17th, and 680 on the 15th. From January 1st, 1898, up to October 31st, rain fell at Knockdolian on 140 days to the total amount of 24.177 inches. In 1898, the rainfall of the corresponding ten months was 17.801 inches on 133 days; in 1894, 32.221 inches on 164 days, in 1895, 26.270 inches on 131 days; in 1896, 27.537 inches on 137 days; and in 1897, 32.730 inches on 171 days.

At Clonsilla, Killiney, Co. Dublin, the rainfall in October was 3.533 inches on 18 days, compared with 7.10 inch on 14 days in 1893, 6.460 inches on 17 days in 1894, 2.650 inches on 14 days in 1895, 5.230 inches on 21 days in 1896, 2.280 inches on 11 days in 1897, and a thirteen years' average (1885-1897) of 3.905 inches on 15.8 days. On the 17th, 85 inch fell. Since January 1, 1898, 2172 inches of rain have fallen at this station on 154 days.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall in October was 4.385 inches on 17 days, compared with 3.175 inches on 13 days in October, 1897. Of this quantity 8.20 inch was recorded on the 15th, and .660 inch on the 8th. The highest temperature in the screen was 57° on the 4th, the lowest was 37.7° on the 20th. At this Second Order Station the rainfall from January 1 to October 31, inclusive, amounted to 25.476 inches on 189 days.

NOVEMBER.—November, 1898, was a month of surprises. Opening mild and changeable, with fresh S.W. winds, it afterwards became fine, quiet, and at times foggy. A brief period of frost on the 22nd was followed by a minimum of exceptional severity and persistence; so that in four days 3.230 inches of rain fell in Dublin; 3.58 inches at Clonsilla, Killiney; 4.72 inches at Parnassus, Bray; 3.678 inches at Newcastle, Co. Wicklow; 3.350 inches at Greystones; 4.18 inches in the Phoenix Park; and 3.330 inches at Glasnevin. Another cold spell followed this storm, but the last day of the month was mild.

In Dublin the arithmetical mean temperature (46.2°) was decidedly above the average (44.7°); the mean dry-bulb readings at 9 a.m. and 9 p.m. were 45.6°. In the thirty-three years ending with 1897, November was coldest in 1878 (M. T. = 38.2°), and in 1870 (M. T. = 42.2°), warmest in 1881 (M. T. = 50.3°). In 1897 the M. T. was 48.6°.

The mean height of the barometer was 29.783 inches, or 0.071 inch below the corrected average value for November—namely, 29.850 inches. The mercury rose to 30.312 inches at 9 p.m. of the 18th, and fell to 28.761 inches at 9 a.m. of the 25th. The observed range of atmospheric pressure was, therefore, 1.551 inches.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 45.6°, or 6.1° below the value for October. The arithmetical mean of the maximal and minimal readings was 46.2°, compared with a twenty-five years' average of 44.7°. On the 2nd the thermometer in the screen rose to 62.7°—wind, S.W.; on the 22nd the temperature fell to 29.0°—wind, W.S.W. The minimum on the grass was 26.2°, also on the 22nd.

The rainfall was 4.485 inches, distributed over 17 days—the rainfall was much above, while the rainy days were equal to the average. The average rainfall for November in the twenty-five years, 1865-89, inclusive, was 2.452 inches, and the average number of rainy days was 17.0. In 1888, 6.439 inches fell on 26 days. On the other hand, the rainfall in 1896 was only .664 inch on 9 days. In 1897, 3.422 inches fell on 14 days.

High winds were noted on 7 days, and attained the force of a gale on the 2nd and 3rd. The atmosphere was more or less foggy in Dublin on the 8th, 9th, 10th, 15th, 17th, 19th, and 27th. Solar halos were seen on the 1st and 22nd. Hail, or sleet and snow fell on the 3rd, 22nd, 25th and 29th. Lightning was seen on the 3rd, 27th, and 28th, and a thunderstorm occurred on the morning of the 26th.

The rainfall in Dublin during the eleven months ending November 30th amounted to 25.982 inches on 173 days, compared with 15.378 inches on 141 days during the same period in 1887; 22.716 inches on 174 days in 1896, 27.503 inches on 193 days in 1897, and a twenty-five years' average of 23.292 inches on 177.4 days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall in November was 4.609 inches, distributed over 16 days. Of this quantity 1.900 inches fell on the 23rd. From January 1, 1898, up to November 30, rain fell at that station on 156 days, and to the total amount of 28.786 inches. The corresponding figures for 1897 were 38.185 inches on 188 days.

At Clonsilla, Killiney, Co. Dublin, 5.005 inches of rain fell on 19 days, compared with a thirteen years' average of 2.755 inches on 16.9 days. The maximal fall in 24 hours was 2.06 inches on the 23rd. Since January 1, 1898, 26.77 inches of rain have fallen at this station on 173 days. The corresponding figures for 1897 were 28.64 inches on 184 days.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, the rainfall in November was 4.721 inches, distributed over 18 days. The maximal fall in 24 hours was 1.652 inches on the 23rd. Since January 1, 1898, the rainfall at Newcastle has amounted to 31.197 inches on 157 days. The corresponding figures for 1897 were 35.328 inches on 173 days. On November 16th the screened thermometers at the National Hospital rose to 62.2°, on the 29th they fell to 31.0°.

DECEMBER.—The closing month of 1898 was the warmest December on record for many decades. The mean temperature in Dublin was 6.3° above the average. There was scarcely a trace of frost, and snow, sleet and hail were entirely absent. Fresh to strong south-westerly and westerly winds prevailed throughout the month. The rainfall was not half the average, while the rainy days

much exceeded it. The highest daily temperatures were sometimes reached at night, as is not unusual in cyclonic or south-westerly weather during the winter months.

In Dublin the arithmetical mean temperature (47.6°) was much above the average (41.3°), the mean day bulb readings at 9 a.m. and 9 p.m. were 47.0° . In the thirty-three years ending with 1879, December was coldest in 1878 (M. T. = 32.8°), and in 1874 (M. T. = 36.8°), and warmest, in 1865 (M. T. = 45.2°). In 1897, the M. T. was 44.9° . December, 1898, accordingly establishes a record in the matter of high mean temperature.

The mean height of the barometer was 29.925 inches, or 0.050 inch above the corrected average value for December—namely, 29.875 inches. The mercury rose to 30.543 inches at 9 a.m. of the 30th and fell to 28.985 inches at 9 a.m. of the 29th. The observed range of atmospheric pressure was, therefore, 1.558 inches.

The mean temperature deduced from daily readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was 47.0° , or actually 1.4° above the value for November. Using the formula, *Mean Temp. =* $\frac{\text{Max.} + (\text{mean} \times 52)}{2}$, the value was 47.7° , or 6.2° above the average mean temperature for December, calculated in the same way, in the twenty-five years, 1865-89, inclusive (41.5°). The arithmetical mean of the maximal and minimal readings was 47.6° , compared with a twenty-five years' average of 41.3° . On the 3th the thermometer in the screen rose to 58.6° —wind, S.W.; on the 20th the temperature fell to 32.1° —wind, W.N.W. The minimum on the grass was 28.4° , on the 30th. There was no frost in the screen, but 6 days of frost on the grass were recorded.

The rainfall was 1.066 inches, distributed over as many as 21 days. The average rainfall for December in the twenty-five years, 1865-89, was 2.464 inches, and the average number of rainy days was 16.9. The rainfall, therefore, was much below, while the rainy days were above the average. In 1876 the rainfall in December was very large—7.366 inches on 22 days. In 1872, 4.632 inches fell on as many as 24 days; and in 1888 (which was otherwise a fine and dry year), 4.749 inches fell on as many as 27 days. On the other hand, in 1867, only .771 inch was measured on 13 days; in 1885, only .742 inch on 10 days; in 1892, only .795 inch on 10 days; and in 1871, only .797 inch on 15 days. In 1897, 1.841 inches of rain fell on 18 days.

A lunar halo was seen on the 28th. High winds were noted on 22 days, and attained the force of a gale on five occasions—the 2nd, 10th, 12th, 27th, and 31st. The atmosphere was more or less foggy in Dublin on the 8th, 15th, and 17th. There was no snow, or sleet, or hail.

The rainfall in Dublin during 1898 amounted to 27.048 inches on 194 days, compared with 29.344 inches on 211 days in 1897, 26.991 inches on 194 days in 1896, 31.242 inches on 194 days in 1895, 29.261 inches on 208 days in 1894, only 20.436 inches on 174 days in 1893, 25.644 inches on 196 days in 1892, 27.829 inches on 184 days in 1891, 27.462 inches on 200 days in 1890, 27.278 inches on 193 days in 1889, 28.679 inches on 190 days in 1888, 16.601 inches on 169 days in 1887, and a twenty-five years' average of 27.696 inches on 194.3 days.

At Knocknolman, Greystones, Co. Wicklow, the rainfall in December, 1898, was 1.760 inches distributed over 15 days. Of this quantity .540 inch fell on the 26th. From January 1st to December 31st, 1898, rain fell at Knocknolman on 171 days, to the total amount of 30.546 inches. The corresponding figures for 1893 were 22.526 inches on 170 days; for 1894, 38.776 inches on 184 days; for 1895, 35.135 inches on 174 days; for 1896, 36.102 inches on 169 days, and for 1897, 42.685 inches on 210 days.

Mr. Robert O'Brien Furlong, M.A., writes:—

The rainfall at Clonsilla, Killybeg, in December, 1898, was 1.20 inches on 15 days. The maximal fall in 24 hours was .35 inch on the 30th. The average December rainfall of the twelve years 1885-96, was 2.490 inches on 17.3 days. The total rainfall for 1898, was 27.97 inches, being in excess of the average of the eleven years, 1885-95, viz., 26.58 inches. Rain measuring .01 inch and upwards fell on 188 days, the average of eleven years being 178.

At the National Hospital for Consumption, Newcastle, Co. Wicklow, rain fell during December on 17 days to the amount of 1.940 inches, .611 inch being measured on the 26th. At this Station of the Second Order the highest temperature in the shade was 58.0° on the 17th, the lowest was 31.9° on the 30th. The rainfall for the year 1898 was 33.137 inches on 174 days, compared with 40.193 inches on 194 days in 1897.

RAINFALL IN 1898,

At 40, Fitzwilliam-square, West, Dublin.

Rain Gauge.—Diameter of funnel, 8 in. Height of tap—above ground, 1 ft. 4 in., above sea level, 50 ft.

Month.	Total Depth.	Greatest Fall in 24 hours.	Number of Days on which at least one fell.	Month.	Total Depth.	Greatest Fall in 24 hours.	Number of Days on which at least one fell.
	Inches.	Depth.	Date.		Inches.	Depth.	Date.
January. . .	3.753	.465	2nd	August. . .	2.662	.752	20th
February. . .	1.761	.076	17th	September. . .	3.929	.929	24th
March. . .	1.961	.781	27th	October. . .	2.575	.946	27th
April. . .	3.869	.701	29th	November. . .	4.425	1.710	31st
May. . .	2.702	.589	2nd	December. . .	1.869	.768	20th
June. . .	1.947	.929	30th				
July. . .	.962	.512	29th	Total. . .	27.048	—	194

The rainfall was 648 inch in defect of the average annual measurement of the twenty-five years, 1865-89, inclusive—viz., 27-696 inches.

It is to be remembered that the rainfall in 1887 was very exceptionally small—16-601 inches, the only approach to this measurement in Dublin being in 1870, when only 20-839 inches fell, in 1884, when the measurement was 20-467 inches, and in 1893 with its rainfall of 20-493 inches. In seven of the twenty-five years in question the rainfall was less than 26 inches.

The sunny rainfall in 1887 was in marked contrast to the abundant downpour in 1886 when 32-966 inches—or as nearly as possible double the fall of 1887—fell on 220 days. Only twice since these records commenced has the rainfall in Dublin exceeded that of 1886—namely, in 1872, when 35-566 inches fell on 238 days, and in 1880, when 34-512 inches were measured on, however, only 188 days.

In 1886 there were 194 rainy days, or days upon which not less than 0-05 inch of rain (five-thousandths of an inch) was measured. This was equal to the average number of rainy days, which was 194-3 in the twenty-five years, 1865-89, inclusive. In 1868 and 1887—the warm, dry years of recent times—the rainy days were only 160, and in 1870 they were only 145.

The rainfall in 24 hours, from 9 a.m. to 9 a.m., exceeded one inch only once in 1886—namely, on November 23rd, when 1-732 inches were measured. In 1892 the daily rainfall twice exceeded 1 inch—viz., May 28th (2-056 inches) and August 16th (1-310 inches). On no occasion in 1893 did one inch of rain fall on a given day in Dublin. In 1894 falls of upwards of an inch of rain in 24 hours were recorded on four occasions, viz., May 15th (1-330 inches); July 24th (1-560 inches); August 25th (1-369 inches); and October 23rd (1-042 inches). In 1895, 1-802 inches fell on January 12th; 1-014 inches on July 24th; and 1-256 inches on July 25th. In 1896, 1-563 inches fell on July 8th, 2-030 inches on July 24th; and 1-288 inches on December 8th. In 1897, 1-166 inches fell on September 1st.

Included in the 194 rainy days in 1886 are 13 on which snow or sleet fell, and 20 on which there was hail. In March hail was observed on 8 days, in April on one day, in May on 5 days, in June on 2 days, and in November, on 4 days. Snow or sleet fell on 9 days in March, and on 4 days in November. Thunderstorms occurred once in May, June, and November. Thunder alone also occurred once in June, July, and August. Lightning was also seen on three occasions in August, once in September and in October, and three times in November.

The rainfall in the first six months was 12-115 inches, on 98 days. The rainfall exceeded 3 inches in May (3-332), August (3-456), October (3-597) and November (4-435). In July it was only 9-45 inches on 8 days.

The rainfall was distributed as follows—4-570 inches fell on 48 days in the first quarter, 7-545 inches on 50 days in the second, 5-853 inches on 39 days in the third, 9-080 inches on 57 days in the fourth and last quarter.

Brilliant aurora borealis was observed on March 15th and September 9th. More or less fog prevailed on 50 occasions—8 in January, 3 in February, 5 in March, 5 in April, 1 in May, and in June, 2 in July, 4 in August, 3 in September, 8 in October, 7 in November, and 3 in December. High winds were noted on 131 days—8 in January, 18 in February, 11 in March, 8 in April, 9 in May, 8 in June, 9 in July, 12 in August, 9 in September, 10 in October, 7 in November, and 22 in December. The high winds amounted to gales (force 7 or upwards according to the Beaufort scale) on 30 occasions—4 in January, 5 in February, 2 in March, 2 in April, 1 in July, 4 in August, 3 in September, 2 in October, 2 in November, and 5 in December.

Abstract of Meteorological Observations taken at Dublin (46, Fitzwilliam-square, West), during the Year 1898.

Month.	Abs. Max.	Date.	Abs. Min.	Date.	Mean Daily Max.	Mean Daily Min.	Rainfall.	Foggy Days.	Mean Height of Barometer.	Highest Pressure.	Date.	Lowest Pressure.	Date.	Prevailing Winds.
January.	40-1	22nd	31-0	1st	41-6	48-3	7-136	16	30-998	31-435	19th	30-134	2d	S.W., W., E.
February.	40-9	1st	30-1	24th	40-5	47-8	2-742	19	31-180	31-281	11th	31-079	25th	W., S.W.
March.	45-2	19th	30-0	6th	44-3	47-1	1-044	15	31-149	31-229	8th	31-229	22nd	W., N.E., N.W.
April.	49-7	7th	40-4	9th	46-8	44-1	2-935	14	31-120	31-267	9th	31-229	20th	W., S.W., E.
May.	47-7	15th & 20th	38-0	19th	47-5	45-1	2-222	20	31-484	31-226	6th	31-150	2nd	N.W., W., N.E.
June.	58-9	22nd	41-9	22d	46-7	47-8	1-867	14	31-173	31-187	14th	31-120	22nd	S.W., S.W., W.
July.	59-3	23th	44-5	4th	49-0	47-1	2-09	3	31-743	31-600	23rd	31-041	19th	N.W., W.
August.	59-4	10th	47-3	15th	50-0	46-6	2-960	19	31-544	31-600	23rd	31-031	1st	W., N.W., S.W., W.
September.	57-2	9th	45-9	24th	47-9	47-9	3-621	14	31-503	31-400	2nd	31-418	25th	W., S.E., S.W.
October.	44-6	2d	40-9	22th	47-4	46-3	2-970	16	31-774	31-585	4th	31-704	23th	S.E., W., E.
November.	47-7	2nd	37-0	22nd	47-8	46-0	4-028	17	31-775	31-212	10th	31-751	29th	S.W., W.
December.	45-6	25th	31-9	8th	49-1	48-9	1-095	25	31-420	31-645	20th	31-580	24th	S.W., W.
Extremes of Wind, and Meters.	77-9	Sept. 2d	30-1	Feb. 4th	47-4	44-0	41-7	Days 104	Max 31-642	Min 31-030	Jan 23rd	31-170	Nov. 22nd	W., S.W., N.W.

TABLE showing the Monthly and Yearly Rainfall at Dublin during the Twenty-one Years 1878 to 1898, inclusive; with the Means for the Twenty Years 1878 to 1897.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Rainfall.
1878.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
1878.	1.040	3.379	1.187	3.219	4.840	3.889	3.880	4.444	1.854	3.068	1.884	1.618	34.399
1879.	1.114	3.004	1.931	3.807	3.040	4.848	4.332	3.764	2.646	1.320	1.350	3.012	39.448
1880.	3.000	2.191	3.930	3.933	3.647	3.168	3.697	3.601	3.031	15.769	3.110	3.212	54.420
1881.	1.000	3.319	1.694	3.493	1.352	3.366	1.943	4.729	1.396	3.470	3.173	3.398	37.484
1882.	1.476	1.800	3.790	3.129	1.540	5.344	5.319	2.052	3.618	3.384	3.904	3.719	31.184
1883.	3.870	3.702	1.000	3.207	3.028	3.702	3.222	3.307	3.629	3.001	3.074	1.907	39.481
1884.	3.160	3.319	1.936	3.332	1.389	1.840	3.040	7.77	1.114	3.04	1.420	2.900	30.487
1885.	1.917	2.913	1.680	3.911	3.420	1.300	1.914	3.300	3.939	3.660	3.808	3.43	30.114
1886.	3.784	1.891	3.061	1.936	1.472	3.105	1.720	1.165	3.471	3.185	3.180	3.343	30.909
1887.	1.508	3.41	1.484	2.299	3.89	3.02	1.184	3.499	1.910	3.399	3.029	1.891	18.701
1888.	1.787	1.097	3.193	1.993	3.59	3.846	3.881	3.913	3.90	1.917	3.449	3.811	30.419
1889.	3.762	2.440	3.069	3.897	3.131	3.30	3.520	3.247	1.048	4.812	3.94	1.134	37.373
1890.	3.073	3.00	3.733	3.149	3.886	1.480	3.158	3.738	3.489	3.68	3.913	1.666	37.939
1891.	3.99	3.603	3.32	1.853	3.790	3.153	3.197	4.052	3.132	3.908	3.811	3.599	37.930
1892.	3.440	3.118	3.01	1.154	4.877	1.971	3.619	3.367	3.911	3.423	3.408	3.795	35.944
1893.	2.230	2.905	3.69	3.048	1.739	1.739	3.043	3.731	3.93	3.833	1.970	3.692	30.489
1894.	3.430	1.008	1.792	3.183	3.140	1.819	3.773	3.736	4.63	3.967	1.499	3.811	30.181
1895.	3.711	3.31	2.740	2.649	3.171	3.172	4.302	3.549	3.68	3.543	3.399	3.544	30.987
1896.	3.99	3.09	3.218	3.93	1.20	1.933	1.474	1.916	3.002	3.415	3.94	4.395	30.901
1897.	3.856	1.504	3.904	3.468	3.133	3.937	3.680	3.719	3.933	3.218	3.422	1.940	30.946
Means.	3.079	3.007	1.899	1.323	3.068	2.129	3.198	3.369	3.068	3.393	3.529	3.907	37.905
1898.	1.788	1.765	1.643	3.868	3.938	3.947	3.61	3.458	3.432	3.970	4.435	1.000	37.038

* February, 1891, was the driest month of the twenty-one years.

† December, 1818, was the wettest month of the twenty-one years.

‡ October, 1848, was the month of the heaviest rainfall.

§ Heaviest month in 14 hours—3.78 inches, on October 17th, 1848.

TABLE showing the Monthly and Yearly Number of Rainy Days* at Dublin during the Twenty-one Years 1878 to 1898, inclusive; with the Means for the Twenty Years 1878 to 1897.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Rainy Days.
1878.	20	14	17	16	23	19	9	22	16	18	11	19	208
1879.	10	26	16	17	23	24	24	19	18	14	10	10	208
1880.	5	17	16	30	9	16	24	20	18	115	20	16	155
1881.	16	18	17	18	15	21	13	21	13	18	18	16	198
1882.	17	16	17	20	36	25	25	11	15	20	24	21	227
1883.	20	17	12	10	13	18	22	14	14	14	19	13	188
1884.	18	20	17	11	26	19	26	8	14	14	14	20	167
1885.	23	19	23	16	23	8	10	14	20	22	17	10	196
1886.	26	18	19	15	21	15	18	10	10	14	18	21	220
1887.	16	11	15	10	19	5	13	10	16	11	18	19	160
1888.	9	14	18	17	11	18	22	12	10	16	26	17	190
1889.	16	20	17	21	17	6	15	22	18	22	9	15	190
1890.	21	7	17	14	17	18	24	29	14	11	17	11	200
1891.	14	12	16	14	17	14	15	19	18	19	15	21	184
1892.	20	19	9	13	19	17	12	22	19	17	19	10	194
1893.	19	22	8	7	10	13	14	14	14	16	17	19	174
1894.	23	16	14	20	17	19	21	18	8	20	15	18	209
1895.	24	9	19	18	8	13	16	27	7	16	21	27	184
1896.	14	10	23	16	7	14	19	19	20	22	9	20	194
1897.	17	16	24	22	14	20	12	24	16	14	14	18	211
Means.	17.5	18.2	16.2	18.2	19.1	15.4	17.7	17.0	18.0	16.6	17.1	17.1	190.0
1898.	14	18	16	16	20	14	5	18	13	19	17	21	194

* Days on which 31 inch, or upwards, of rain fell within the 24 hours.

† Wettest month of the twenty-one years. Rainfall = 4.713 inches.

‡ Driest month of the twenty-one years. Rainfall = .042 inch.

§ Month of the heaviest rainfall = 7.19 inches.

TABLE showing the Temperature of the Air in Dublin in the Twenty-one Years 1878-1898, and the Average Temperature for the Twenty Years 1878 to 1897, inclusive, as recorded by Dr. J. W. Moore.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
1878, . . .	42.4	43.9	43.6	47.6	52.4	57.0	61.0	59.6	58.6	50.7	37.9	32.0	45.4
1879, . . .	54.7	52.5	41.6	43.7	47.4	54.9	59.0	56.6	58.6	45.0	33.1	27.0	46.4
1880, . . .	58.0	44.2	54.4	55.6	51.0	59.0	57.9	60.3	57.6	44.6	33.4	41.6	48.2
1881, . . .	32.4	59.6	43.5	46.7	52.5	53.0	53.9	56.0	53.6	47.2	39.4	39.6	47.7
1882, . . .	63.0	42.4	46.9	46.0	52.0	54.7	58.5	59.2	52.0	49.8	42.7	37.4	46.9
1883, . . .	62.4	43.6	56.0	45.6	50.6	53.0	56.0	56.0	54.3	46.0	42.5	41.6	46.2
1884, . . .	66.6	43.4	44.5	48.5	51.0	56.6	53.7	60.5	55.3	43.5	45.0	40.3	49.6
1885, . . .	60.6	42.7	49.7	45.6	47.4	54.9	58.6	58.9	52.2	44.6	45.1	41.2	47.6
1886, . . .	57.2	55.0	49.5	48.9	49.8	56.0	53.3	56.5	55.1	51.2	45.7	37.0	47.9
1887, . . .	42.7	41.6	40.3	43.9	50.0	60.9	62.4	58.0	52.0	49.5	41.6	39.1	49.5
1888, . . .	41.6	37.9	38.0	46.7	53.5	60.1	59.8	57.0	52.6	50.1	46.2	42.7	47.9
1889, . . .	41.6	32.4	48.0	45.2	53.4	56.2	57.4	57.5	54.0	47.2	45.6	45.0	49.9
1890, . . .	44.7	41.0	44.0	47.9	52.9	57.8	57.7	59.9	58.5	51.5	44.6	38.6	49.6
1891, . . .	40.2	46.7	41.5	45.4	49.2	56.6	59.6	57.8	57.5	49.8	43.4	45.2	46.1
1892, . . .	58.9	41.6	34.0	45.9	53.6	56.1	57.3	59.6	54.2	44.6	59.9	59.7	46.1
1893, . . .	41.9	42.7	37.6	52.1	55.2	59.4	61.1	62.4	53.3	48.8	43.6	42.7	53.2
1894, . . .	47.2	56.9	55.1	48.5	43.5	56.5	58.8	57.6	53.3	43.6	47.8	51.9	49.2
1895, . . .	55.4	34.2	43.9	47.6	53.6	58.6	58.7	52.7	59.7	46.0	47.0	41.6	48.0
1896, . . .	44.4	45.2	45.0	50.5	54.7	60.3	60.4	57.0	55.5	44.3	42.2	51.4	50.4
1897, . . .	52.2	46.0	45.1	45.6	50.5	58.2	60.0	60.4	54.2	52.5	46.6	49.1	50.4
Average, . . .	40.3	42.0	42.8	44.0	51.4	57.1	59.0	58.5	55.0	48.2	44.4	40.8	48.0
1898, . . .	47.9	42.9	42.6	49.4	50.6	57.6	63.4	61.0	52.6	52.7	46.2	47.7	52.6

DUBLIN CASTLE,

20th June, 1899.

Sir,

I have to acknowledge the receipt of your Letter of the 17th instant, forwarding, for submission to His Excellency the Lord Lieutenant, the Agricultural Statistics of Ireland, with detailed Report on Agriculture for the year 1898.

I am, Sir,

Your obedient Servant,

D. HARREL.

The Registrar-General,

Charlemont House,

Rutland Square.

Despatch : Printed for Her Majesty's Stationery Office,
By ALAN TROSE & Co. Limited, 21, 23, & 25, Abchurch-lane,
The Queen's Printer in Ordinary.

AGRICULTURAL STATISTICS

OF

IRELAND,

WITH

DETAILED REPORT ON AGRICULTURE,

FOR THE YEAR

1898.

DIVISION OF LAND, ACREAGE UNDER CROPS, NUMBER AND SIZE OF HOLDINGS, NUMBER OF OCCUPERS OF LAND, WOODS AND PLANTATIONS, VALUE OF PRODUCE, NUMBER AGES & OF LIVE STOCK, NUMBER OF BOARS KEPT FOR BREEDING PURPOSES, DAIRY INDUSTRIES, DISEASES OF ANIMALS, EXPORTS AND IMPORTS OF LIVE STOCK, HORSE PRODUCE, NUMBER OF SOUTHERN MILLS, NUMBER OF CORN MILLS, SHOPS AND LANSAGE, FORESTRY OPERATIONS, WAGES OF AGRICULTURAL LABOURERS, THE WEATHER.

Presented to both Houses of Parliament by Command of Her Majesty.



DUBLIN:

PRINTED BY P. A. WARD, STATIONERY OFFICE, 1904
BY THE GOVERNMENT OF IRELAND.

Printed by the Government of Ireland, Dublin, 1904.
Printed by the Government of Ireland, Dublin, 1904.
Printed by the Government of Ireland, Dublin, 1904.
Printed by the Government of Ireland, Dublin, 1904.
Printed by the Government of Ireland, Dublin, 1904.

1898